

AD-A142 974 PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK  
STATISTICS(U) ARMY ENGINEER INST FOR WATER RESOURCES  
FORT BELVOIR VA M V FLEMING ET AL. APR 84 IWR-84-SR-2  
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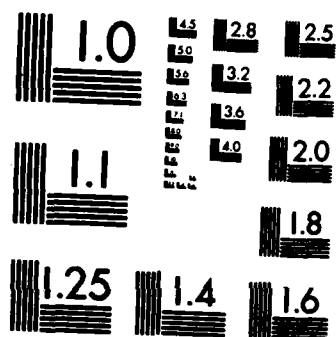
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US Army Corps  
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# Performance Monitoring System : Summary of Lock Statistics for July - September 1983

AD-A142 974

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) lock Performance Monitoring System PMS statistics		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Lock Performance Monitoring data are collected at Corps locks by lock operators from observation and information provided by waterway operator. This quarterly summary is an overview of the collected statistics.		

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**PERFORMANCE MONITORING SYSTEM  
SUMMARY OF LOCK STATISTICS  
JULY 1983 - SEPTEMBER 1983**

Marilyn V. Fleming  
and  
Kevin A. Alexander

U.S. Army Corps of Engineers  
Water Resources Support Center  
Institute for Water Resources  
Ft. Belvoir, Virginia 22060

April 1984

Summary Report 84-SR-2

## PREFACE

This report is a product of the Navigation Data Management and Analysis Branch of the U. S. Army Engineer Institute for Water Resources (WRSC-IWR). The information is compiled from statistics collected at the Corps locks in support of the lock Performance Monitoring System (PMS).

The study is managed by Mrs. Marilyn V. Fleming under the supervision of Mr. Francis M. Sharp, Chief of the WRSC-IWR Navigation Data Management and Analysis Branch, and Dr. Lloyd G. Antle, Chief of the WRSC-IWR Navigation Division. The Office of the Chief of Engineers (OCE) sponsors are Mr. Henry W. Campbell Jr., DAEN-CWO-M, and Mr. Robert M. Daniel, DAEN-CWF-S.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-355-2240 or FTS 385-2240) or Marilyn Fleming at the same telephone number. The information is produced and distributed quarterly.

*James R. Hanchey*  
JAMES R. HANCHEY  
Director, WRSC-IWR



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## Introduction

The lock Performance Monitoring System (PMS) is a part of the Inland Navigation Systems Analysis (INSA) program and encompasses the collection, editing, maintenance and analysis of data collected at all Corps-owned and operated locks. The data have been collected since March of 1975 and consist of information describing the traffic through the locks as well as the physical aspects of lockages. The quarterly summary of selected statistics presented in the appendix provides an overview of the traffic and operation at each lock. The quarterly report is presented as a set of three tables for each Corps District. Information reported for each lock and chamber includes:

1. A listing providing the name of the lock, the river on which the lock is and its dimensions. In those cases where there is no quarterly information, this table will be the only display for the district.
2. A table providing, by direction and total, the number of tows, commercial vessels other than tows, recreational vessels, barges (empty and loaded), commercial lockages, recreational lockages and tonnage.
3. A summary of approach, entry chambering and exit times (maximum, minimum and average) and the number of delays, total delay time, maximum delay time and average delay time.

Although the summary information will be computed and displayed for chambers at which there is data for only one or two months of the quarter, the fact is noted on the report.



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B2	NEW ORLEANS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GULF INTRACOASTAL	01-PORT ALLEN LOCK	1202/0084/15.0
	02-BAYOU SORREL LOCK	0800/0056/16.0
	03-INNER HRBR NAVIGATION CANL LK	0626/0074/40.0
	04-ALGIERS LOCK	0760/0075/15.0
	05-HARVEY LOCK	0426/0075/14.0
	06-BAYOU BOEUF LOCK	1148/0075/15.0
	07-VERMILLION LOCK	1195/0056/14.0
	08-CALCASIEU LOCK	1194/0075/15.0
ATCHAFALAYA RIVER	11-BERNICK LOCK	0300/0045/11.0
GULF INTRACOASTAL	21-SCHOONER BAYOU CONTROL STRUCT	9999/0075/14.0
	22-CATFISH POINT CONTROL STRUCT	9999/0056/16.0
	23-CALCASIEU SALT WATER BARRIER	9999/0056/15.0
BAYOU TECHE	31-KEYSTONE LOCK	0160/0036/12.0
FRESHWATER BAYOU	41-FRESHWATER BAYOU LOCK	0590/0084/15.0
OLD RIVER	51-OLD RIVER LOCK	1200/0075/15.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST. LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KASKASKIA RIVER	01-KASKASKIA RIVER NAVAGATION LK	0610/0084/12.0
MISSISSIPPI RIVER	24-LOCK & DAM 24	0610/0110/12.0
	25-LOCK & DAM 25	0610/0110/12.0
	26-LOCK & DAM 26	0610/0110/12.0
	26-LOCK & DAM 26 AUX 1	0380/0110/12.0
	27-CHAIN OF ROCKS LOCK & DAM 27	1210/0110/12.0
	27-CHAIN OF ROCKS LK & DM 27 AX1	0610/0110/12.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC 83	DISTRICT NAME ST. LOUIS	DIVISION NAME LOWER MISS VALLEY						MONTHS REPORTED				
							7/83	8/83			9/83	
-----												
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
-----												
KASKASKIA RIVER												
KASKASKIA RIVER NAVAGATION LK	***											
UPBOUND STATISTICS	129	657	52	838	476	6	482	184	276	4	464	6
DOWNBOUND STATISTICS	127	640	62	829	5	483	488	190	315	5	510	722
TOTALS	256	1297	114	1667	481	489	970	374	591	9	974	728
MISSISSIPPI RIVER												
LOCK & DAM 24	***											
UPBOUND STATISTICS	626	281	35	942	6374	1943	8317	1099	149	15	1263	2912
DOWNBOUND STATISTICS	587	308	38	933	207	7272	7479	1025	202	10	1237	10233
TOTALS	1213	589	73	1875	6581	9215	15796	2124	351	25	2500	13145
LOCK & DAM 25	***											
UPBOUND STATISTICS	632	558	53	1243	6392	1991	8383	1086	278	22	1386	2988
DOWNBOUND STATISTICS	582	619	55	1256	189	7253	7442	995	309	17	1321	10194
TOTALS	1214	1177	108	2499	6581	9244	15825	2081	587	39	2707	13182
LOCK & DAM 26	***											
UPBOUND STATISTICS	695	5	9	709	7073	2920	9993	1372	1	5	1378	4319
DOWNBOUND STATISTICS	666	15	13	694	434	8766	9200	1326	0	1	1327	12388
TOTALS	1361	20	22	1403	7507	11686	19193	2698	1	6	2705	16707
LOCK & DAM 26 AUX 1	***											
UPBOUND STATISTICS	487	166	49	702	1452	984	2436	959	108	25	1092	1759
DOWNBOUND STATISTICS	444	210	56	710	461	1782	2243	875	137	28	1040	2638
TOTALS	931	376	105	1412	1913	2766	4679	1834	245	53	2132	4397
CHAIN OF ROCKS LOCK & DAM 27	***											
UPBOUND STATISTICS	1106	42	86	1234	8657	3816	12473	1128	14	11	1153	5926
DOWNBOUND STATISTICS	1046	23	85	1154	733	10720	11453	1073	9	6	1088	15394
TOTALS	2152	65	171	2388	9390	14536	23926	2201	23	17	2241	21320

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B3	ST. LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
												(NAV, OPN, ETC)

## MISSISSIPPI RIVER

CHAIN OF ROCKS LK & DM 27 AX1	***											
UPBOUND STATISTICS	329	164	123	616	586	288	874	435	68	27	530	418
DOWNBOUND STATISTICS	351	291	130	772	256	695	951	468	123	25	616	1048
TOTALS	680	455	253	1388	842	983	1825	903	191	52	1146	1466

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
83	ST. LOUIS	LOWER MISS VALLEY	7/83	8/83	9/83

APPROACH			LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY	
			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX				
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(IN MINUTES)					

## KASKASKIA RIVER

KASKASKIA RIVER NAVIGATION L	1	3	44	1	2	29	3	9	29	1	2	20	:	38	483	12.7	52
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## MISSISSIPPI RIVER

LOCK & DAM 24	1	5	81	1	8	59	5	12	41	1	14	46	:	1201	1426439	1187.7	3818
LOCK & DAM 25	1	6	115	1	8	39	2	8	32	1	14	72	:	1298	472349	363.9	1721
LOCK & DAM 26	1	2	67	1	10	42	4	13	38	1	10	58	:	1370	1927722	1407.1	3953
LOCK & DAM 26 AUX 1	1	5	68	1	6	46	4	13	43	1	10	69	:	1030	374394	363.5	2223
CHAIN OF ROCKS LOCK & DAM 27	1	9	87	1	8	38	3	11	61	1	8	29	:	1816	130222	71.7	620
CHAIN OF ROCKS LK & DM 27 AX	1	6	39	1	3	30	5	10	70	1	3	56	:	387	7736	20.0	350

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OUCHITA/BLACK RIV	01-JONESVILLE LOCK & DAM	0655/0084/23.4
	02-COLUMBIA LOCK & DAM	0655/0084/27.4
	06-LOCK & DAM 6	0300/0055/17.4
	08-LOCK & DAM 8	0300/0055/19.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED									
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83							
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LOCKGS RECRTN	LOCKGS OTHER	LOCKGS TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
OUCHITA/BLACK RIV												
JONESVILLE LOCK & DAM	***											
UPBOUND STATISTICS	27	7	2	36	35	34	69	31	5	19	55	65
DOWNBOUND STATISTICS	28	7	5	40	35	35	70	39	6	21	66	53
TOTALS	55	14	7	76	70	69	139	70	11	40	121	118
COLUMBIA LOCK & DAM	***											
UPBOUND STATISTICS	12	9	0	21	13	14	27	14	4	0	18	20
DOWNBOUND STATISTICS	10	10	0	20	12	11	23	11	5	2	18	17
TOTALS	22	19	0	41	25	25	50	25	9	2	36	37
LOCK & DAM 6	***											
UPBOUND STATISTICS	7	162	8	177	2	12	14	10	80	4	94	6
DOWNBOUND STATISTICS	7	157	10	174	14	0	14	9	79	5	93	0
TOTALS	14	319	18	351	16	12	28	19	159	9	187	6
LOCK & DAM 8	***											
UPBOUND STATISTICS	8	40	2	50	2	14	16	9	27	2	38	7
DOWNBOUND STATISTICS	7	46	0	53	15	0	15	8	29	1	38	0
TOTALS	15	86	2	103	17	14	31	17	56	3	76	7

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
B4	VICKSBURG	LOWER MISS VALLEY	7/83	8/83	9/83

---

LOCK PROCESSING TIME (MIN.)												:	DELAYED DELAY	DELAY	DELAY	
APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS TIME	AVG	MAX	
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	(IN MINUTES)

---

OUCHITA/BLACK RIV

JONESVILLE LOCK & DAM	2	6	17	1	4	33	4	18	49	1	6	32	:	11	46	4.2	20
COLUMBIA LOCK & DAM	3	6	12	2	5	15	5	17	30	4	7	20	:	3	29	9.7	15
LOCK & DAM 6	1	2	14	1	2	19	5	11	39	1	3	18	:	174	767	4.4	20
LOCK & DAM 8	1	4	20	1	3	20	5	12	28	2	5	21	:	69	336	4.9	15



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E3	NEW YORK	NORTH ATLANTIC	7/83	8/83	9/83

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
HUDSON RIVER	01-TROY LOCK & DAM	0493/0044/15.0

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC E3	DISTRICT NAME NEW YORK	DIVISION NAME NORTH ATLANTIC	MONTHS REPORTED		
			7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)

(NAV, OPN, ETC)

## HUDSON RIVER

TROY LOCK & DAM	***											
UPBOUND STATISTICS	99	1166	4	1269	1	102	103	113	629	18	760	227
DOWNBOUND STATISTICS	97	1314	6	1417	94	3	97	115	676	20	811	0
TOTALS	196	2480	10	2686	95	105	200	228	1305	38	1571	227

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
E3	NEW YORK	NORTH ATLANTIC	7/83	8/83 9/83

LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY		
APPROACH			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX		
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX
(IN MINUTES)																		

## HUDSON RIVER

TROY LOCK & DAM	1	7	25	2	5	25	5	10	20	2	5	10	:	475	5623	11.8	55
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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
DISMAL SWAMP	01-DEEP CREEK LOCK	0300/0052/12.0
	02-SOUTH MILLS LOCK	0300/0052/12.0
ATLANT INTRACOASTAL	11-GREAT BRIDGE GUARD LOCK	0600/0072/16.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME						MONTHS REPORTED				
E4	NORFOLK	NORTH ATLANTIC						7/83	8/83		9/83	
-----												
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (K TONS)
-----												
DISMAL SWAMP												
DEEP CREEK LOCK	***	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	0	87	0	87	0	0	0	0	52	0	52	0
DOWNBOUND STATISTICS	0	123	0	123	0	0	0	0	61	0	61	0
TOTALS	0	210	0	210	0	0	0	0	113	0	113	0
SOUTH MILLS LOCK	***	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS	0	129	0	129	0	0	0	2	63	0	65	0
DOWNBOUND STATISTICS	0	83	0	83	0	0	0	2	47	1	50	0
TOTALS	0	212	0	212	0	0	0	4	110	1	115	0
ATLANT INTRCOASTAL												
GREAT BRIDGE GUARD LOCK	***											
UPBOUND STATISTICS	140	1282	77	1499	98	96	194	197	603	26	826	114
DOWNBOUND STATISTICS	152	1400	63	1615	90	96	186	195	597	29	821	105
TOTALS	292	2682	140	3114	188	192	380	392	1200	55	1647	219

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
E4	NORFOLK	NORTH ATLANTIC	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY	
APPROACH			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX	
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(IN MINUTES)		

## DISMAL SWAMP

DEEP CREEK LOCK	2	4	10	1	4	5	4	9	15	2	5	15	:	113	572	5.1	60
-----------------	---	---	----	---	---	---	---	---	----	---	---	----	---	-----	-----	-----	----

SOUTH MILLS LOCK	2	3	12	2	3	7	5	11	20	3	3	15	:	115	1835	16.0	150
------------------	---	---	----	---	---	---	---	----	----	---	---	----	---	-----	------	------	-----

## ATLANT INTRACOASTAL

GREAT BRIDGE GUARD LOCK	1	3	22	1	3	25	1	5	43	1	4	27	:	1647	6708	4.1	45
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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

---

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
BLK ROCK CH/TOMAWANDA	01-BLACK ROCK LOCK	0650/0070/21.7

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)

(NAV, OPN, ETC)

## BLK ROCK CH/TONAWANDA

BLACK ROCK LOCK	***											
UPBOUND STATISTICS	6	3896	32	3934	5	1	6	353	764	16	1133	2
DOWNBOUND STATISTICS	26	3155	2	3183	3	24	27	41	883	17	941	350
TOTALS	32	7051	34	7117	8	25	33	394	1647	33	2074	352



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F1	BUFFALO	NORTH CENTRAL	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												:	DELAYED	DELAY	DELAY	
APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS	TIME	AVG	MAX
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	:	(IN MINUTES)			

BLK ROCK CH/TONAWANDA

BLACK ROCK LOCK	1	1	15	1	1	15	1	12	20	1	1	15	:	2102	6719	3.2	45
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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
F3	DETROIT	NORTH CENTRAL	7/83	8/83 9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ST MARYS RIVER	01-MACARTHUR LOCK	0800/0080/31.0
	02-NEW POE LOCK	1200/0110/32.0
	03-DAVIS LOCK00	1350/0080/31.0
	04-SABIN LOCK00	1350/0080/31.0
THE INLAND ROUTE	11-ALANSON LOCK	0000/0000/****
FOX RIVER	11-DE PERE LOCK & DAM	0146/0036/ 6.0
	12-LITTLE KAUKAUNA LOCK & DAM	0146/0036/ 6.0
	13-RAPIDE CROCHE LOCK & DAM	0146/0036/ 6.0
	21-KAUKAUNA LOCK 1	0144/0035/ 6.0
	22-KAUKAUNA LOCK 2	0144/0035/ 6.0
	23-KAUKAUNA LOCK 3	0144/0037/ 6.0
	24-KAUKAUNA LOCK 4	0144/0037/ 6.0
	25-KAUKAUNA LOCK 5	0144/0036/ 6.0
	32-LITTLE CHUTE LOCK 2	0142/0035/ 6.0
	33-LITTLE CHUTE COMB LOCKS UPPER	0144/0037/ 6.0
	34-LITTLE CHUTE COMB LOCKS LOWER	0146/0036/ 6.0
	35-CEDARS LOCK & DAM	0144/0035/ 6.0
	41-APPLETON LOCK 1	0145/0035/ 6.0
	42-APPLETON LOCK 2	0145/0035/ 6.0
	43-APPLETON LOCK 3	0144/0035/ 6.0
	44-APPLETON LOCK 4	0144/0035/ 6.0
	51-MENASHA LOCK & DAM	0144/0035/ 6.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
F4	ROCK ISLAND	NORTH CENTRAL	7/83	8/83
				9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ILLINOIS	01-THOMAS J O'BRIEN	1200/0110/12.0
	02-LOCKPORT LOCK	1200/0110/12.0
	03-BRANDON ROAD LOCK & DAM	1200/0110/12.0
	04-DRESDEN ISLAND LOCK & DAM	1200/0110/12.0
	05-MARSIELLES LOCK & DAM	1200/0110/12.0
	06-STARVED ROCK LOCK & DAM	1200/0110/12.0
	07-PEORIA LOCK & DAM	1200/0110/12.0
	08-LAGRANGE LOCK & DAM	1200/0110/12.0
MISSISSIPPI RIVER	11-LOCK & DAM 11	1350/0110/10.0
	12-LOCK & DAM 12	1350/0110/10.0
	13-LOCK & DAM 13	1350/0110/10.0
	14-LOCK & DAM 14	1350/0110/10.0
	14-LOCK & DAM 14 AUXILIARY 1	1350/0110/10.0
	15-LOCK & DAM 15	1350/0110/10.0
	15-LOCK & DAM 15 AUXILIARY 1	1350/0110/10.0
	16-LOCK & DAM 16	1350/0110/10.0
	17-LOCK & DAM 17	1350/0110/10.0
	18-LOCK & DAM 18	1350/0110/10.0
	19-LOCK & DAM 19	1350/0110/10.0
	19-LOCK & DAM 19 AUXILIARY 1	1350/0110/10.0
	20-LOCK & DAM 20	1350/0110/10.0
	21-LOCK & DAM 21	1350/0110/10.0
	22-LOCK & DAM 22	1350/0110/10.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL					MONTHS REPORTED						
							7/83	8/83			9/83		
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
ILLINOIS													
THOMAS J O'BRIEN		***											
UPBOUND STATISTICS		319	4441	70	4830	331	636	967	382	1278	24	1684	939
DOWNBOUND STATISTICS		317	4487	67	4871	466	520	986	383	1224	21	1628	826
TOTALS		636	8928	137	9701	797	1156	1953	765	2502	45	3312	1765
LOCKPORT LOCK		***											
UPBOUND STATISTICS		440	220	38	698	522	1978	2500	516	113	0	629	2955
DOWNBOUND STATISTICS		459	279	33	771	1515	1041	2556	520	125	1	646	1656
TOTALS		899	499	71	1469	2037	3019	5056	1036	238	1	1275	4611
BRANDON ROAD LOCK & DAM		***											
UPBOUND STATISTICS		454	287	54	795	599	1986	2585	537	150	3	690	2982
DOWNBOUND STATISTICS		444	329	58	831	1449	1107	2556	526	136	3	665	1740
TOTALS		898	616	112	1626	2048	3093	5141	1063	286	6	1355	4722
BRESDEN ISLAND LOCK & DAM		***											
UPBOUND STATISTICS		405	704	31	1140	658	2070	2728	490	347	5	842	3123
DOWNBOUND STATISTICS		400	738	35	1173	1412	1313	2725	488	344	8	840	2102
TOTALS		805	1442	66	2313	2070	3383	5453	978	691	13	1682	5225
MARSELLES LOCK & DAM		***											
UPBOUND STATISTICS		381	624	37	1042	753	1912	2665	488	286	9	783	3038
DOWNBOUND STATISTICS		392	683	25	1100	1204	1521	2725	497	317	12	826	2406
TOTALS		773	1307	62	2142	1957	3433	5390	985	603	21	1609	5444
STARVED ROCK LOCK & DAM		***											
UPBOUND STATISTICS		398	693	34	1125	921	1958	2879	511	305	23	839	3121
DOWNBOUND STATISTICS		402	761	28	1191	1155	1768	2923	510	319	27	856	2747
TOTALS		800	1454	62	2316	2076	3726	5802	1021	624	50	1695	5868
PEORIA LOCK & DAM		***											
UPBOUND STATISTICS		428	483	49	960	1439	2284	3723	529	274	91	894	3626
DOWNBOUND STATISTICS		444	550	37	1031	1243	2587	3830	541	312	95	948	3889
TOTALS		877	1033	86	1991	2682	4871	7553	1070	586	186	1842	7515

EROC F4	DISTRICT NAME	DIVISION NAME						MONTHS REPORTED					
	ROCK ISLAND	NORTH CENTRAL						7/83		8/83		9/83	
RIVER/LOCK NAME		TOWS	VESSL RECTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
ILLINOIS													
LAGRANGE LOCK & DAM		***											
UPBOUND STATISTICS		431	296	22	749	1820	1911	3731	526	148	101	775	3167
DOWNBOUND STATISTICS		453	351	12	816	753	3058	3811	546	171	101	818	4552
TOTALS		884	647	34	1565	2573	4969	7542	1072	319	202	1593	7719
MISSISSIPPI RIVER													
LOCK & DAM 11		***											
UPBOUND STATISTICS		428	1212	48	1688	3976	1230	5206	636	646	9	1291	1835
DOWNBOUND STATISTICS		416	1294	48	1758	268	4570	4838	594	659	14	1267	6485
TOTALS		844	2506	96	3446	4244	5800	10044	1230	1305	23	2558	8320
LOCK & DAM 12		***											
UPBOUND STATISTICS		461	1025	18	1504	4235	1376	5611	675	597	7	1279	2014
DOWNBOUND STATISTICS		450	1060	19	1529	265	4946	5211	652	627	15	1294	6981
TOTALS		911	2085	37	3033	4500	6322	10822	1327	1224	22	2573	8995
LOCK & DAM 13		***											
UPBOUND STATISTICS		462	1045	19	1526	4253	1382	5635	690	529	5	1224	2032
DOWNBOUND STATISTICS		449	1079	18	1546	252	4948	5200	665	546	11	1222	6965
TOTALS		911	2124	37	3072	4505	6330	10835	1355	1075	16	2446	8997
LOCK & DAM 14		***											
UPBOUND STATISTICS		580	683	31	1294	5191	1648	6839	920	385	6	1311	2425
DOWNBOUND STATISTICS		573	781	22	1376	291	6023	6314	891	373	9	1273	8177
TOTALS		1153	1464	53	2670	5482	7671	13153	1811	758	15	2584	10602
LOCK & DAM 14 AUXILIARY 1		***											
UPBOUND STATISTICS		0	1658	0	1658	0	0	0	0	334	0	334	0
DOWNBOUND STATISTICS		0	1614	0	1614	0	0	0	0	348	0	348	0
TOTALS		0	3272	0	3272	0	0	0	0	682	0	682	0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL						MONTHS REPORTED					
								7/83	8/83		9/83		
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
MISSISSIPPI RIVER													
LOCK & DAM 15		***											
UPBOUND STATISTICS		538	14	22	574	4891	1684	6575	988	17	1	1006	2475
DOWNBOUND STATISTICS		534	15	20	569	324	5806	6130	973	17	3	993	8148
TOTALS		1072	29	42	1143	5215	7490	12705	1961	34	4	1999	10623
LOCK & DAM 15 AUXILIARY 1		***											
UPBOUND STATISTICS		111	1844	70	2025	75	78	153	179	736	2	917	114
DOWNBOUND STATISTICS		117	1908	62	2087	99	68	167	179	781	3	963	105
TOTALS		228	3752	132	4112	174	146	320	358	1517	5	1880	219
LOCK & DAM 16		***											
UPBOUND STATISTICS		627	277	31	935	5239	1924	7163	1047	195	14	1256	2853
DOWNBOUND STATISTICS		615	338	34	987	415	6235	6650	1006	230	20	1256	8773
TOTALS		1242	615	65	1922	5654	8159	13813	2053	425	34	2512	11626
LOCK & DAM 17		***											
UPBOUND STATISTICS		609	166	15	790	5416	2105	7521	1055	141	23	1219	3100
DOWNBOUND STATISTICS		593	186	12	791	503	6460	6963	1002	158	30	1190	9053
TOTALS		1202	352	27	1581	5919	8565	14484	2057	299	53	2409	12161
LOCK & DAM 18		***											
UPBOUND STATISTICS		613	358	32	1003	5543	2144	7687	1028	296	16	1340	3174
DOWNBOUND STATISTICS		589	373	34	996	493	6598	7091	975	312	17	1304	9228
TOTALS		1202	731	66	1999	6036	8742	14778	2003	608	33	2644	12402
LOCK & DAM 19		***											
UPBOUND STATISTICS		600	271	51	922	5874	1979	7853	631	125	10	766	2933
DOWNBOUND STATISTICS		578	305	47	930	326	6899	7225	590	146	10	746	9666
TOTALS		1178	576	98	1852	6200	8878	15078	1221	271	20	1512	12599
LOCK & DAM 19 AUXILIARY 1		NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 20		***											
UPBOUND STATISTICS		605	222	79	906	5966	1988	7954	1101	147	26	1274	2939
DOWNBOUND STATISTICS		584	276	81	941	314	6980	7294	1033	201	22	1256	9779
TOTALS		1189	498	160	1847	6280	8968	15248	2134	348	48	2530	12718

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC F4	DISTRICT NAME ROCK ISLAND	DIVISION NAME NORTH CENTRAL		MONTHS REPORTED									
				7/83	8/83	9/83							
-----													
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)	
-----													
MISSISSIPPI RIVER													
LOCK & DAM 21	***												
UPBOUND STATISTICS	608	287	57	952	6137	1902	8039	1095	182	30	1307	2845	
DOWNBOUND STATISTICS	579	337	53	969	196	7128	7324	1009	236	31	1276	9990	
TOTALS	1187	624	110	1921	6333	9030	15363	2104	418	61	2583	12835	
LOCK & DAM 22	***												
UPBOUND STATISTICS	606	358	35	999	6174	1956	8130	1083	191	20	1294	2918	
DOWNBOUND STATISTICS	572	408	31	1011	167	7156	7323	1004	225	16	1245	10078	
TOTALS	1178	766	66	2010	6341	9112	15453	2087	416	36	2539	12996	

[illegible]

THOMAS J O'BRIEN	1	1	21	1	1	22	1	14	71	1	1	15 :	284	4043	14.2	75
LOCKPORT LOCK	1	8	55	1	9	40	9	26	95	1	10	98 :	768	62681	81.6	777
BRANDON ROAD LOCK & DAM	1	9	55	1	9	70	2	19	88	1	10	63 :	716	54580	76.2	1490
DRESDEN ISLAND LOCK & DAM	1	6	393	1	7	436	1	16	197	1	9	89 :	571	43982	77.0	673
MARSIELLES LOCK & DAM	1	8	183	1	7	275	2	18	85	1	11	78 :	521	72863	139.9	1440
STARVED ROCK LOCK & DAM	1	6	62	1	7	56	4	16	77	1	11	68 :	497	60034	120.8	624
PEORIA LOCK & DAM	1	5	46	1	8	38	1	9	71	1	11	63 :	807	62597	77.6	525
LASRANGE LOCK & DAM	1	7	90	1	9	35	1	7	35	1	14	68 :	815	83132	102.0	1640

LOCK & DAM 11	1	5	386	1	5	32	1	10	127	1	10	226 :	664	85297	128.5	1440
LOCK & DAM 12	1	6	73	1	5	64	1	7	398	1	11	742 :	680	106213	156.2	1446
LOCK & DAM 13	1	4	340	1	6	35	1	9	103	1	12	55 :	655	86136	131.5	1530
LOCK & DAM 14	1	5	85	1	7	124	2	8	190	1	14	127 :	947	253934	268.1	2215
LOCK & DAM 14 AUXILIARY 1	1	1	1	1	1	1	5	17	48	1	1	1 :	0	0	0.0	0
LOCK & DAM 15	1	9	395	1	8	388	1	10	68	1	18	93 :	874	198572	227.2	1720
LOCK & DAM 15 AUXILIARY 1	1	1	61	1	1	21	1	10	81	1	1	425 :	60	2017	33.6	1440



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EROC F4	DISTRICT NAME ROCK ISLAND			DIVISION NAME NORTH CENTRAL			MONTHS REPORTED										
							7/83			8/83			9/83				
<hr/>																	
LOCK PROCESSING TIME (MIN.)																	
APPROACH			ENTRY			CHAMBER			EXIT			: DELAYED DELAY		DELAY		DELAY	
MIN AVG MAX			MIN AVG MAX			MIN AVG MAX			MIN AVG MAX			: VESSELS TIME		AVG		MAX	
(IN MINUTES)																	
<hr/>																	
MISSISSIPPI RIVER																	
<hr/>																	
LOCK & DAM 16																	
	1	7	80	1	8	78	1	8	62	1	15	92	:	1088	221905	204.0	2132
LOCK & DAM 17																	
	1	10	388	1	8	67	1	9	449	1	14	356	:	1093	307774	281.6	1707
LOCK & DAM 18																	
	1	7	125	1	8	55	1	7	334	1	15	85	:	1077	221056	205.3	1579
LOCK & DAM 19																	
	1	16	116	1	8	27	4	17	101	1	9	26	:	786	62603	79.6	472
LOCK & DAM 19 AUXILIARY 1																	
	NO DATA RECORDED FOR THIS LOCK																
LOCK & DAM 20																	
	1	6	70	1	8	36	2	6	64	1	16	67	:	997	156962	157.4	1100
LOCK & DAM 21																	
	1	7	90	1	8	35	1	6	68	1	16	85	:	1064	173072	162.7	609
LOCK & DAM 22																	
	1	8	152	1	9	56	1	7	74	1	18	105	:	1199	970709	809.6	3114

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
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ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
F5	ST. PAUL	NORTH CENTRAL	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
MISSISSIPPI RIVER	01-LOCK & DAM 1 MAIN CHBR 1	0400/0056/11.0
	01-LOCK & DAM 1 MAIN CHBR 2	0400/0056/11.0
	02-LOCK & DAM 2	0600/0110/11.0
	02-LOCK & DAM 2 AUXILIARY 1	0500/0110/11.0
	03-LOCK & DAM 3	0600/0110/11.0
	04-LOCK & DAM 4	0600/0110/11.0
	05-LOCK & DAM 5	0600/0110/11.0
	06-LOCK & DAM 6	0600/0110/11.0
	07-LOCK & DAM 7	0600/0110/11.0
	08-LOCK & DAM 8	0600/0110/11.0
	09-LOCK & DAM 9	0600/0110/11.0
	10-LOCK & DAM 10	0600/0110/11.0
	51-ST ANTHONY FALLS UPPER L & D	0400/0056/11.0
	52-ST ANTHONY FALLS LOWER L & D	0400/0056/11.0
	55-LOCK & DAM 5A	0600/0110/11.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
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EROC F5	DISTRICT NAME ST. PAUL	DIVISION NAME NORTH CENTRAL						MONTHS REPORTED					9/83
		7/83			8/83								
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (*TONS)	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)		
-----													
MISSISSIPPI RIVER													
LOCK & DAM 1 MAIN CHBR 1	***												
UPBOUND STATISTICS	296	1631	13	1940	291	251	542	330	702	15	1047	313	
DOWNBOUND STATISTICS	285	1750	29	2064	201	327	528	327	693	14	1034	486	
TOTALS	581	3381	42	4004	492	578	1070	657	1395	29	2081	799	
LOCK & DAM 1 MAIN CHBR 2	***	ONLY FIRST AND SECOND MONTHS REPORTED											
UPBOUND STATISTICS	1	0	0	1	2	0	2	2	0	0	2	0	
DOWNBOUND STATISTICS	0	2	0	2	0	0	0	1	0	1	2	0	
TOTALS	1	2	0	3	2	0	2	3	0	1	4	0	
LOCK & DAM 2	***												
UPBOUND STATISTICS	404	2357	11	2772	3912	530	4442	530	832	17	1379	808	
DOWNBOUND STATISTICS	403	2340	8	2751	84	4057	4141	526	798	18	1342	5727	
TOTALS	807	4697	19	5523	3996	4587	8583	1056	1630	35	2721	6535	
LOCK & DAM 2 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK												
LOCK & DAM 3	***												
UPBOUND STATISTICS	346	3504	51	3901	3597	514	4111	478	1103	19	1600	771	
DOWNBOUND STATISTICS	343	3701	51	4095	64	3739	3803	428	1168	20	1616	5287	
TOTALS	689	7205	102	7996	3661	4253	7914	906	2271	39	3216	6058	
LOCK & DAM 4	***												
UPBOUND STATISTICS	356	2527	12	2895	3713	563	4276	463	1025	23	1511	852	
DOWNBOUND STATISTICS	350	2663	19	3032	54	3925	3979	447	1022	29	1498	5554	
TOTALS	706	5190	31	5927	3767	4488	8255	910	2047	52	3009	6406	
LOCK & DAM 5	***												
UPBOUND STATISTICS	361	2054	9	2424	3674	630	4254	472	887	18	1377	950	
DOWNBOUND STATISTICS	352	2060	17	2429	66	3889	3955	456	896	22	1374	5496	
TOTALS	713	4114	26	4853	3690	4519	8209	928	1783	40	2751	6446	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC F5	DISTRICT NAME ST. PAUL	DIVISION NAME NORTH CENTRAL					MONTHS REPORTED						9/83
							7/83	8/83					
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RIVER/LOCK NAME	TOWS	VESSEL	VESSEL	VESSEL	BARGE	BARGE	BARGE	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)		
-----													
MISSISSIPPI RIVER													
LOCK & DAM 6		***											
UPBOUND STATISTICS		380	2319	12	2711	3956	658	4614	497	969	37	1503	992
DOWNBOUND STATISTICS		366	2442	19	2827	58	4230	4288	475	1050	40	1565	5976
TOTALS		746	4761	31	5538	4014	4888	8902	972	2019	77	3068	6968
LOCK & DAM 7		***											
UPBOUND STATISTICS		382	3313	24	3719	3951	671	4622	512	1115	23	1650	1020
DOWNBOUND STATISTICS		367	3353	25	3745	58	4227	4285	475	1198	27	1700	5985
TOTALS		749	6666	49	7464	4009	4898	8907	987	2313	50	3350	7005
LOCK & DAM 8		***											
UPBOUND STATISTICS		371	1432	13	1816	3901	747	4648	509	739	26	1274	1126
DOWNBOUND STATISTICS		362	1482	13	1857	77	4262	4339	495	736	26	1257	6010
TOTALS		733	2914	26	3673	3978	5009	8987	1004	1475	52	2531	7136
LOCK & DAM 9		***											
UPBOUND STATISTICS		366	1475	102	1943	3676	1082	4758	505	783	15	1303	1590
DOWNBOUND STATISTICS		358	1485	106	1949	247	4156	4403	491	772	14	1277	5874
TOTALS		724	2960	208	3892	3923	5238	9161	996	1555	29	2580	7464
LOCK & DAM 10		***											
UPBOUND STATISTICS		449	1560	14	2023	4136	1109	5245	607	782	49	1438	1639
DOWNBOUND STATISTICS		417	1591	33	2041	248	4632	4880	578	852	50	1480	6529
TOTALS		866	3151	47	4064	4384	5741	10125	1185	1634	99	2918	8168
ST ANTHONY FALLS UPPER L & D		***											
UPBOUND STATISTICS		223	1178	24	1425	240	111	351	245	419	4	668	144
DOWNBOUND STATISTICS		217	1292	30	1539	85	257	342	248	425	5	678	367
TOTALS		440	2470	54	2964	325	368	693	493	844	9	1346	511
ST ANTHONY FALLS LOWER L & D		***											
UPBOUND STATISTICS		300	1164	8	1472	295	249	544	306	416	9	731	309
DOWNBOUND STATISTICS		285	1296	20	1601	199	328	527	304	420	11	735	472
TOTALS		585	2460	28	3073	494	577	1071	610	836	20	1466	781

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED			
F5	ST. PAUL	NORTH CENTRAL	7/83	8/83	9/83	

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
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(NAV, OPN, ETC)

## MISSISSIPPI RIVER

## LOCK &amp; DAM 5A

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UPBOUND STATISTICS	360	2652	39	3051	3624	622	4246	496	1099	13	1608	939
DOWNBOUND STATISTICS	351	2653	36	3040	69	3866	3935	447	1165	26	1638	5470
TOTALS	711	5305	75	6091	3693	4488	8181	943	2264	39	3246	6409

[illegible]

LOCK & DAM 1 MAIN CHBR 1	1	2	13	1	4	58	3	11	32	1	3	26 :	515	7688	14.9	123
LOCK & DAM 1 MAIN CHBR 2	1	2	5	2	8	13	10	14	16	3	4	6 :	0	0	0.0	0
LOCK & DAM 2	1	4	107	1	6	55	3	9	52	1	8	58 :	1618	95767	59.2	525
LOCK & DAM 2 AUXILIARY 1	NO DATA RECORDED FOR THIS LOCK															
LOCK & DAM 3	1	4	116	1	6	58	1	5	55	1	8	76 :	1879	76029	40.5	423
LOCK & DAM 4	1	4	86	1	5	35	4	5	17	1	8	50 :	1711	59116	34.6	607
LOCK & DAM 5	1	4	64	1	5	66	4	7	26	1	8	56 :	1513	68018	45.0	775
LOCK & DAM 6	1	5	79	1	5	85	2	5	55	1	8	55 :	1699	75711	44.6	515
LOCK & DAM 7	1	4	110	1	5	38	4	6	27	1	7	47 :	1995	83476	41.8	528
LOCK & DAM 8	1	4	78	1	6	56	4	7	27	1	10	54 :	1328	94107	70.9	966
LOCK & DAM 9	1	5	115	1	5	31	4	6	56	1	10	78 :	472	37894	80.3	510
LOCK & DAM 10	1	5	119	1	6	69	3	6	17	1	10	108 :	1445	94812	65.6	1007
ST ANTHONY FALLS UPPER L & D	1	2	40	1	3	22	6	9	25	1	2	20 :	119	1612	13.5	47
ST ANTHONY FALLS LOWER L & D	1	2	19	1	3	27	4	11	54	1	2	24 :	375	4990	13.3	120
LOCK & DAM 5A	1	4	71	1	5	27	4	6	24	1	7	52 :	1804	54058	30.0	688

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
62	PORTLAND	NORTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
COLUMBIA RIVER	01-BONNEVILLE LOCK & DAM	0500/0074/15.0
	02-THE DALLES DAM	0650/0084/15.0
	03-JOHN DAY LOCK & DAM	0650/0084/15.0
WILLAMETTE RIVER	11-WILLAMETTE FALLS LOCKS 1 - 4	0200/0037/ 6.5
	15-WILLAMETTE FALLS GUARD LOCK	0200/0037/ 6.5

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC 62	DISTRICT NAME PORTLAND	DIVISION NAME NORTH PACIFIC						MONTHS REPORTED				
								7/83	8/83		9/83	
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RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
-----												
COLUMBIA RIVER												
BONNEVILLE LOCK & DAM	***											
UPBOUND STATISTICS	234	183	19	436	511	262	773	458	145	31	634	429
DOWNBOUND STATISTICS	243	220	22	485	73	729	802	499	114	33	646	1587
TOTALS	477	403	41	921	584	991	1575	957	259	64	1280	2016
THE DALLES DAM	***											
UPBOUND STATISTICS	201	80	5	286	410	247	657	225	50	7	282	420
DOWNBOUND STATISTICS	195	76	4	275	70	577	647	219	51	8	278	1384
TOTALS	396	156	9	561	480	824	1304	444	101	15	560	1804
JOHN DAY LOCK & DAM	***											
UPBOUND STATISTICS	187	106	11	304	400	243	643	211	44	20	275	417
DOWNBOUND STATISTICS	181	117	11	309	71	557	628	204	52	22	278	1420
TOTALS	368	223	22	613	471	800	1271	415	96	42	553	1837
WILLAMETTE RIVER												
WILLAMETTE FALLS LOCKS 1 - 4	***											
UPBOUND STATISTICS	105	312	23	440	34	119	153	142	215	3	360	32
DOWNBOUND STATISTICS	103	367	29	499	7	133	140	138	212	3	353	39
TOTALS	208	679	52	939	41	252	293	280	427	6	713	71
WILLAMETTE FALLS GUARD LOCK	***											
UPBOUND STATISTICS	110	177	165	452	30	92	122	47	41	382	470	20
DOWNBOUND STATISTICS	114	228	166	508	14	100	114	45	37	381	463	29
TOTALS	224	405	331	960	44	192	236	92	78	763	933	49



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERG	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED
62	PORTLAND	NORTH PACIFIC	7/83 8/83 9/83

[illegible]

**COLUMBIA RIVER**

BONNEVILLE LOCK & DAM	1	6	70	1	6	55	5	22	86	1	4	33 :	681	43407	63.7	465
THE DALLES DAM	1	5	28	1	5	30	2	21	78	1	5	15 :	414	4161	10.1	59
JOHN DAY LOCK & DAM	1	4	33	1	5	40	2	24	81	1	4	20 :	553	2896	5.2	65

## WILLAMETTE RIVER

WILLAMETTE FALLS LOCKS 1 - 4	1	1	14	1	1	22	1	33	116	1	1	13 :	518	762	1.5	50
WILLAMETTE FALLS GUARD LOCK	1	1	11	1	1	3	1	1	31	1	1	11 :	716	720	1.0	4

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
63	SEATTLE	NORTH PACIFIC	7/83	8/83	9/83

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
LAKE WASHINGTON SHP CA	01-HIRAM M CHITTENDEN LOCKS	0800/0080/30.0
	01-HIRAM M CHITTENDEN LOCKS AUX1	0123/0030/25.0

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED			
63	SEATTLE	NORTH PACIFIC	7/83	8/83	9/83	

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RIVER/LOCK NAME	TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)

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(NAV, OPN, ETC)

## LAKE WASHINGTON SHP CA

HIRAM M CHITTENDEN LOCKS	***											
UPBOUND STATISTICS	334	7081	747	8162	102	302	404	740	111	91	942	438
DOWNBOUND STATISTICS	313	6495	745	7553	246	338	584	707	124	48	879	180
TOTALS	647	13576	1492	15715	348	640	988	1447	235	139	1821	618

HIRAM M CHITTENDEN LOCKS AUX1	***											
UPBOUND STATISTICS	31	8074	654	8759	21	11	32	906	1422	132	2460	0
DOWNBOUND STATISTICS	23	8450	531	9004	8	15	23	764	1613	168	2545	0
TOTALS	54	16524	1185	17763	29	26	55	1670	3035	300	5005	0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
63	SEATTLE	NORTH PACIFIC	7/83	8/83	9/83

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LOCK PROCESSING TIME (MIN.)												:	DELAYED	DELAY	DELAY	DELAY	
APPROACH				ENTRY		CHAMBER				EXIT		:	VESSELS	TIME	AVG	MAX	
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	MAX
												:	(IN MINUTES)				

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## LAKE WASHINGTON SHP CA

NIRAM M CHITTENDEN LOCKS	1	2	15	1	3	42	2	14	68	1	7	86	:	1744	8688	5.0	231
NIRAM M CHITTENDEN LOCKS AUX	1	1	19	1	1	26	1	4	41	1	8	46	:	1987	10926	5.5	90

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
64	WALLA WALLA	NORTH PACIFIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SNAKE RIVER	01-ICE HARBOR LOCK & DAM	0651/0085/14.0
	02-LOWER MONUMENTAL LOCK & DAM	0651/0085/14.0
	03-LITTLE GOOSE LOCK & DAM	0651/0085/14.0
	04-LOWER GRANITE LOCK & DAM	0651/0085/14.0
COLUMBIA RIVER	24-MCMARY LOCK & DAM	0651/0085/14.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED									
64	WALLA WALLA	NORTH PACIFIC	7/83		8/83		9/83					
RIVER/LOCK NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
SNAKE RIVER												
ICE HARBOR LOCK & DAM	***											
UPBOUND STATISTICS	196	684	56	936	409	67	476	274	275	1	550	35
DOWNBOUND STATISTICS	221	680	25	926	10	459	469	265	255	4	524	1117
TOTALS	417	1364	81	1862	419	526	945	539	530	5	1074	1152
LOWER MONUMENTAL LOCK & DAM	***											
UPBOUND STATISTICS	134	186	8	328	357	65	422	161	108	1	270	35
DOWNBOUND STATISTICS	136	194	4	334	11	404	415	161	107	2	270	958
TOTALS	270	380	12	662	368	469	837	322	215	3	540	993
LITTLE GOOSE LOCK & DAM	***											
UPBOUND STATISTICS	132	215	6	353	336	65	401	156	104	36	296	35
DOWNBOUND STATISTICS	133	206	2	341	9	385	394	158	108	39	305	899
TOTALS	265	421	8	694	345	450	795	314	212	75	601	934
LOWER GRANITE LOCK & DAM	***											
UPBOUND STATISTICS	128	384	9	521	244	55	299	155	222	7	384	30
DOWNBOUND STATISTICS	129	394	3	526	10	281	291	154	224	7	385	638
TOTALS	257	778	12	1047	254	336	590	309	446	14	769	668
COLUMBIA RIVER												
MCMARY LOCK & DAM	***											
UPBOUND STATISTICS	243	219	8	470	450	355	805	266	118	5	389	577
DOWNBOUND STATISTICS	237	216	8	461	126	653	779	266	118	3	387	1557
TOTALS	480	435	16	931	576	1008	1584	532	236	8	776	2134

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
64	WALLA WALLA	NORTH PACIFIC	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												:	DELAYED DELAY	DELAY	DELAY
APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS TIME	AVG	MAX
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	:	(IN MINUTES)		

## SNAKE RIVER

ICE HARBOR LOCK & DAM	1	3	48	1	4	30	9	26	61	1	3	16	:	574	3899	6.8	110
LOWER MONUMENTAL LOCK & DAM	1	4	20	1	4	20	9	22	53	1	3	11	:	331	1898	5.7	88
LITTLE GOOSE LOCK & DAM	1	3	19	1	3	26	5	19	39	1	4	30	:	498	2607	5.2	46
LOWER GRANITE LOCK & DAM	1	3	27	1	4	20	6	11	36	1	3	15	:	766	5677	7.4	35

## COLUMBIA RIVER

MENARY LOCK & DAM	1	4	21	1	5	24	9	16	60	1	6	17	:	611	3411	5.6	80
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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
KANAWHA RIVER	01-WINFIELD LOCKS & DAM MAIN 1	0360/0056/15.0
	01-WINFIELD LOCKS & DAM MAIN 2	0360/0056/15.0
	02-MARRET LOCKS & DAM MAIN 1	0360/0056/15.0
	02-MARRET LOCKS & DAM MAIN 2	0360/0056/15.0
	03-LONDON LOCKS & DAM MAIN 1	0360/0056/15.0
	03-LONDON LOCKS & DAM MAIN 2	0360/0056/15.0
OHIO RIVER	21-BELLEVILLE LOCKS & DAM	1200/0110/12.0
	21-BELLEVILLE LOCKS & DAM AUX 1	0600/0110/12.0
	22-RACINE LOCKS & DAM	1200/0110/12.0
	22-RACINE LOCKS & DAM AUX 1	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM	0600/0110/12.0
	23-GALLIPOLIS LOCKS & DAM AUX 1	0360/0110/12.0
	24-GREENUP LOCKS & DAM	1200/0110/12.0
	24-GREENUP LOCKS & DAM AUX 1	0600/0110/12.0
	25-CAPT ANT MELDAHL LOCKS & DAM	1200/0110/12.0
	25-CAPT ANT MELDAHL LK&DAM AUX 1	0600/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM	1200/0110/12.0
	72-WILLOW ISLAND LOCKS & DAM AUX	0600/0110/12.0



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H1	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED										9/83
			7/83	8/83									
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)		
-----													
KANAWHA RIVER													
WINFIELD LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	195	48	5	248	586	552	1138	747	78	3	828	823	
DOWNBOUND STATISTICS	201	36	9	246	329	918	1247	784	60	0	844	1082	
TOTALS	396	84	14	494	915	1470	2385	1531	138	3	1672	1905	
WINFIELD LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	241	98	14	353	933	478	1411	771	168	6	945	650	
DOWNBOUND STATISTICS	231	114	17	362	608	686	1294	743	174	12	929	829	
TOTALS	472	212	31	715	1541	1164	2705	1514	342	18	1874	1479	
WARMET LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	133	112	10	255	569	70	639	388	158	2	548	92	
DOWNBOUND STATISTICS	195	98	14	307	77	930	1007	607	209	0	816	1146	
TOTALS	328	210	24	562	646	1000	1646	995	367	2	1364	1238	
WARMET LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	177	291	33	501	703	93	796	419	336	2	757	96	
DOWNBOUND STATISTICS	122	303	31	456	75	344	419	240	275	3	518	421	
TOTALS	299	594	64	957	778	437	1215	659	611	5	1275	517	
LONDON LOCKS & DAM MAIN 1	***												
UPBOUND STATISTICS	39	18	4	61	106	0	106	74	23	1	98	0	
DOWNBOUND STATISTICS	31	23	6	60	1	76	77	55	23	0	78	88	
TOTALS	70	41	10	121	107	76	183	129	46	1	176	88	
LONDON LOCKS & DAM MAIN 2	***												
UPBOUND STATISTICS	121	65	13	199	319	13	332	215	78	0	293	8	
DOWNBOUND STATISTICS	130	60	11	201	6	339	345	231	71	0	302	407	
TOTALS	251	125	24	400	325	352	677	446	149	0	595	415	
OHIO RIVER													
BELLEVILLE LOCKS & DAM	***												
UPBOUND STATISTICS	343	3	5	351	981	2533	3514	345	2	0	347	3843	
DOWNBOUND STATISTICS	333	3	7	343	1443	2094	3537	335	2	0	337	3199	
TOTALS	676	6	12	694	2424	4627	7051	680	4	0	684	7042	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC HI	DISTRICT NAME HUNTINGTON	DIVISION NAME OHIO RIVER	MONTHS REPORTED										9/83
			7/83		8/83		8/83				9/83		
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)													
OHIO RIVER													
BELLEVILLE LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		35	290	8	333	52	65	117	46	173	1	220	66
DOWNBOUND STATISTICS		41	295	10	346	72	54	126	54	183	3	240	35
TOTALS		76	585	18	679	124	119	243	100	356	4	460	101
RACINE LOCKS & DAM		***											
UPBOUND STATISTICS		392	4	4	400	1396	2550	3946	397	3	0	400	3865
DOWNBOUND STATISTICS		383	8	9	400	1476	2503	3979	388	3	0	391	3524
TOTALS		775	12	13	800	2872	5053	7925	785	6	0	791	7389
RACINE LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		44	196	9	249	134	30	164	61	131	1	193	42
DOWNBOUND STATISTICS		53	206	12	271	70	118	188	68	139	4	211	103
TOTALS		97	402	21	520	204	148	352	129	270	5	404	145
GALLIPOLIS LOCKS & DAM		***											
UPBOUND STATISTICS		352	1	3	356	954	2327	3281	581	0	0	581	3580
DOWNBOUND STATISTICS		349	84	8	441	1415	2044	3459	586	1	1	588	2959
TOTALS		701	85	11	797	2369	4371	6740	1167	1	1	1169	6539
GALLIPOLIS LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		78	112	17	207	249	309	558	161	145	8	314	474
DOWNBOUND STATISTICS		83	125	24	232	205	283	488	161	134	7	302	390
TOTALS		161	237	41	439	454	592	1046	322	279	15	616	864
GREENUP LOCKS & DAM		***											
UPBOUND STATISTICS		163	11	4	178	1090	575	1665	165	4	0	169	905
DOWNBOUND STATISTICS		154	8	4	166	289	1266	1555	158	2	0	160	1920
TOTALS		317	19	8	344	1379	1841	3220	323	6	0	329	2825
GREENUP LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		348	409	17	774	2357	962	3319	521	263	2	786	1446
DOWNBOUND STATISTICS		359	375	21	755	528	2993	3521	544	279	2	825	4417
TOTALS		707	784	38	1529	2885	3955	6840	1065	542	4	1611	5863

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED									
HI	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83							
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
(NAV, OPN, ETC)												
OHIO RIVER												
CAPT ANT MELDAHL LOCKS & DAM	***											
UPBOUND STATISTICS	460	17	9	486	2976	1870	4846	467	9	0	476	2941
DOWNBOUND STATISTICS	456	16	12	484	809	4122	4931	457	13	1	471	6206
TOTALS	916	33	21	970	3785	5992	9777	924	22	1	947	9147
CAPT ANT MELDAHL LK&DAM AUX 1	***											
UPBOUND STATISTICS	20	1479	7	1506	40	25	65	27	552	0	579	34
DOWNBOUND STATISTICS	32	1433	6	1471	60	43	103	40	564	1	605	53
TOTALS	52	2912	13	2977	100	68	168	67	1116	1	1184	87
WILLOW ISLAND LOCKS & DAM	***											
UPBOUND STATISTICS	342	10	3	355	1129	2229	3358	347	7	0	354	3297
DOWNBOUND STATISTICS	338	22	5	365	1216	2199	3415	341	9	0	350	3192
TOTALS	680	32	8	720	2345	4428	6773	688	16	0	704	6489
WILLOW ISLAND LOCKS & DAM AUX	***											
UPBOUND STATISTICS	69	259	20	348	151	66	217	100	127	2	229	78
DOWNBOUND STATISTICS	87	238	12	337	88	195	283	108	142	3	253	127
TOTALS	156	497	32	685	239	261	500	208	269	5	482	205

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC HI	DISTRICT NAME HUNTINGTON				DIVISION NAME OHIO RIVER								MONTHS REPORTED								
													7/83		8/83		9/83				
LOCK PROCESSING TIME (MIN.)														:	DELAYED	DELAY	DELAY	DELAY			
APPROACH				ENTRY		CHAMBER				EXIT		:	VESSELS	TIME	AVG	MAX					
MIN AVG MAX				:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:	MIN AVG MAX	:			(IN MINUTES)						
KANAWHA RIVER																					
WINFIELD LOCKS & DAM MAIN 1				1	1	12	310	1	5	68	5	10	29	1	12	295	:	230	33371	145.1	1010
WINFIELD LOCKS & DAM MAIN 2				1	1	9	108	1	4	29	5	11	38	1	10	294	:	354	66440	187.7	1130
MARNET LOCKS & DAM MAIN 1				1	1	9	54	1	4	24	5	8	25	1	9	44	:	61	4658	76.4	250
MARNET LOCKS & DAM MAIN 2				1	1	8	67	1	4	63	5	8	19	1	6	78	:	89	5621	63.2	300
LONDON LOCKS & DAM MAIN 1				1	1	8	20	1	4	13	5	10	28	1	6	23	:	20	3465	173.3	466
LONDON LOCKS & DAM MAIN 2				1	1	9	63	1	4	16	6	9	25	1	7	40	:	67	13244	197.7	582
OHIO RIVER																					
BELLEVILLE LOCKS & DAM				1	1	18	57	1	9	30	8	13	28	1	8	22	:	186	8045	43.3	386
BELLEVILLE LOCKS & DAM AUX 1				1	1	9	38	1	3	30	7	13	30	1	3	25	:	73	903	12.4	45
RACINE LOCKS & DAM				1	1	15	81	2	11	31	9	10	27	2	9	37	:	241	9983	41.4	1440
RACINE LOCKS & DAM AUX 1				1	1	8	34	1	5	36	8	10	24	1	5	22	:	55	620	11.3	31
GALLIPOLIS LOCKS & DAM				1	1	9	64	1	12	60	5	13	51	2	18	75	:	443	101175	228.4	2405
GALLIPOLIS LOCKS & DAM AUX 1				1	1	6	46	1	7	32	5	13	28	1	9	60	:	111	98342	886.0	2585
GREENUP LOCKS & DAM				1	1	14	41	2	10	22	8	11	27	1	9	23	:	92	3291	35.8	153
GREENUP LOCKS & DAM AUX 1				1	1	8	207	2	9	70	5	11	87	1	11	60	:	663	117888	177.8	1023
CAPT ANT WELDAHL LOCKS & DAM				1	1	17	59	1	10	43	5	15	34	1	11	30	:	399	25455	63.8	375

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H1	HUNTINGTON	OHIO RIVER	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												:	DELAYED	DELAY	DELAY	DELAY
APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS	TIME	AVG	MAX
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	(IN MINUTES)

## OHIO RIVER

CAPT ANT MELDAHL LK&DAM AUX	1	4	36	1	2	24	5	12	33	1	2	14	:	43	360	8.4	34
WILLOW ISLAND LOCKS & DAM	1	16	59	1	8	24	7	14	29	1	8	28	:	181	7357	40.6	170
WILLOW ISLAND LOCKS & DAM AU	1	10	40	1	3	16	6	13	25	1	5	28	:	62	929	15.0	40

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H2	LOUISVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GREEN/BARREN RIVER	21-LOCK & DAM 1	0600/0084/12.0
	22-LOCK & DAM 2	0600/0084/12.0
	23-LOCK & DAM 3	0138/0036/12.0
OHIO RIVER	41-MARKLAND LOCKS & DAM	1200/0110/12.0
	41-MARKLAND LOCKS & DAM AUX 1	0600/0110/12.0
	42-MCALPINE LOCKS & DAM	1200/0110/12.0
	42-MCALPINE LOCKS & DAM AUX 1	0600/0110/12.0
	50-LOCK & DAM 50	0600/0110/12.0
	51-LOCK & DAM 51	0600/0110/12.0
	52-LOCK & DAM 52	1200/0110/12.0
	52-LOCK & DAM 52 AUX 1	0600/0110/12.0
	53-LOCK & DAM 53	0600/0110/12.0
	75-CANNELTON LOCK & DAM	1200/0110/12.0
	75-CANNELTON LOCK & DAM AUX	0600/0110/12.0
	76-NEWBURGH LOCK & DAM	1200/0110/12.0
	76-NEWBURGH LOCK & DAM AUX 1	0600/0110/12.0
	77-UNIONTOWN LOCK & DAM	1200/0110/12.0
	77-UNIONTOWN LOCK & DAM AUX 1	0600/0110/12.0
	78-SMITHLAND LOCK & DAM	1200/0110/12.0
	78-SMITHLAND LOCK & DAM AUX 1	1200/0110/12.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERDC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER					MONTHS REPORTED						
							7/83	8/83			9/83		
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
GREEN/BARREN RIVER													
LOCK & DAM 1		***											
UPBOUND STATISTICS		329	142	11	482	1079	183	1262	341	141	1	483	272
DOWNBOUND STATISTICS		326	141	8	475	68	1164	1232	334	141	1	476	1745
TOTALS		655	283	19	957	1147	1347	2494	675	282	2	959	2017
LOCK & DAM 2		***											
UPBOUND STATISTICS		260	50	5	315	1005	18	1023	266	50	1	317	25
DOWNBOUND STATISTICS		266	41	15	322	23	1014	1037	282	40	2	324	1515
TOTALS		526	91	20	637	1028	1032	2060	548	90	3	641	1540
LOCK & DAM 3		NO DATA RECORDED FOR THIS LOCK											
OHIO RIVER													
MARKLAND LOCKS & DAM		***											
UPBOUND STATISTICS		412	9	3	424	2166	1987	4153	418	5	0	423	3205
DOWNBOUND STATISTICS		409	7	6	422	990	3236	4226	417	4	1	422	4921
TOTALS		821	16	9	846	3156	5223	8379	835	9	1	845	8126
MARKLAND LOCKS & DAM AUX 1		***											
UPBOUND STATISTICS		67	1080	5	1152	179	196	375	74	473	7	554	311
DOWNBOUND STATISTICS		84	1174	9	1267	202	300	502	96	538	8	642	453
TOTALS		151	2254	14	2419	381	496	877	170	1011	15	1196	764
MCALPINE LOCKS & DAM		***											
UPBOUND STATISTICS		292	141	55	488	947	1598	2545	330	71	5	406	2520
DOWNBOUND STATISTICS		314	179	44	537	746	2024	2770	351	96	3	450	3093
TOTALS		606	320	99	1025	1693	3622	5315	681	167	8	856	5613
MCALPINE LOCKS & DAM AUX 1		***	ONLY FIRST AND SECOND MONTHS REPORTED										
UPBOUND STATISTICS		216	73	13	302	760	1206	1966	352	26	4	382	1922
DOWNBOUND STATISTICS		231	53	14	298	651	1358	2009	367	26	4	397	2072
TOTALS		447	126	27	600	1411	2564	3975	719	52	8	779	3994

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED									
			7/83		8/83		9/83					
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGS TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS) (NAV, OPN, ETC)
OHIO RIVER												
LOCK & DAM 50	NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 51	NO DATA RECORDED FOR THIS LOCK											
LOCK & DAM 52	***											
UPBOUND STATISTICS	623	35	54	712	3025	2978	6003	443	5	175	623	4795
DOWNBOUND STATISTICS	654	36	59	749	1622	4723	6345	497	10	170	677	6844
TOTALS	1277	71	113	1461	4647	7701	12348	940	15	345	1300	11639
LOCK & DAM 52 AUX 1	***											
UPBOUND STATISTICS	272	46	57	375	983	952	1935	396	26	3	425	1571
DOWNBOUND STATISTICS	275	32	40	347	620	1441	2061	396	31	5	432	2117
TOTALS	547	78	97	722	1603	2393	3996	792	57	8	857	3688
LOCK & DAM 53	NO DATA RECORDED FOR THIS LOCK											
CANNELTON LOCK & DAM	***											
UPBOUND STATISTICS	496	71	6	573	1817	3086	4903	503	29	1	533	4910
DOWNBOUND STATISTICS	498	54	8	560	1322	3621	4943	505	23	0	528	5185
TOTALS	994	125	14	1133	3139	6707	9846	1008	52	1	1061	10095
CANNELTON LOCK & DAM AUX	***											
UPBOUND STATISTICS	23	320	4	347	49	12	61	28	140	1	169	16
DOWNBOUND STATISTICS	29	398	8	435	51	39	90	39	173	2	214	53
TOTALS	52	718	12	782	100	51	151	67	313	3	383	69
NEWBURGH LOCK & DAM	***											
UPBOUND STATISTICS	576	202	24	802	2621	2765	5386	586	49	0	635	4532
DOWNBOUND STATISTICS	581	141	29	751	1428	4117	5545	593	48	2	643	5929
TOTALS	1157	343	53	1553	4049	6882	10931	1179	97	2	1278	10461



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED					9/83
		7/83						8/83					
-----													
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)	
-----													
OHIO RIVER													
NEWBURGH LOCK & DAM AUX 1		***											
UPBOUND STATISTICS	59	1614	32	1705	67	56	123	78	576	4	658	87	
DOWNBOUND STATISTICS	64	1707	55	1826	97	71	168	96	570	2	668	89	
TOTALS	123	3321	87	3531	164	127	291	174	1146	6	1326	176	
UNIONTOWN LOCK & DAM		***											
UPBOUND STATISTICS	546	40	7	593	3635	2284	5919	554	18	0	572	3802	
DOWNBOUND STATISTICS	557	63	8	628	1044	5104	6148	564	21	1	586	7619	
TOTALS	1103	103	15	1221	4679	7388	12067	1118	39	1	1158	11421	
UNIONTOWN LOCK & DAM AUX 1		***											
UPBOUND STATISTICS	39	1044	23	1106	56	46	102	58	551	3	612	75	
DOWNBOUND STATISTICS	44	1103	31	1178	60	47	107	64	594	5	663	72	
TOTALS	83	2147	54	2284	116	93	209	122	1145	8	1275	147	
SMITHLAND LOCK & DAM		***											
UPBOUND STATISTICS	75	105	6	186	382	156	538	82	56	7	145	279	
DOWNBOUND STATISTICS	599	180	25	804	943	5109	6052	623	109	14	746	7741	
TOTALS	674	285	31	990	1325	5265	6590	705	165	21	891	8020	
SMITHLAND LOCK & DAM AUX 1		***											
UPBOUND STATISTICS	625	125	20	770	4370	2191	6561	646	72	15	733	3663	
DOWNBOUND STATISTICS	105	79	10	194	137	935	1072	114	41	7	162	1423	
TOTALS	730	204	30	964	4507	3126	7633	760	113	22	895	5086	

ERDC H2	DISTRICT NAME LOUISVILLE	DIVISION NAME OHIO RIVER	MONTHS REPORTED												7/83	8/83	9/83		
LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY	DELAY	DELAY	DELAY				
APPROACH			ENTRY			CHAMBER			EXIT							: VESSELS TIME	TIME	AVG	MAX
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX								
GREEN/BARREN RIVER																			
LOCK & DAM 1	1	5	65	1	3	30	5	8	34	1	4	33	:	183	3308	18.1	149		
LOCK & DAM 2	1	5	35	1	3	25	5	11	60	1	5	29	:	132	2340	17.7	60		
LOCK & DAM 3	NO DATA RECORDED FOR THIS LOCK																		
OHIO RIVER																			
MARKLAND LOCKS & DAM	1	24	94	1	8	30	5	14	33	1	8	30	:	357	21109	59.1	570		
MARKLAND LOCKS & DAM AUX 1	1	6	66	1	4	31	5	12	25	1	5	45	:	534	34517	64.6	1367		
MCALPINE LOCKS & DAM	1	16	105	1	8	30	5	13	75	1	7	109	:	472	37167	78.7	1934		
MCALPINE LOCKS & DAM AUX 1	1	11	110	1	11	71	5	23	50	1	12	76	:	464	341674	736.4	2528		
LOCK & DAM 50	NO DATA RECORDED FOR THIS LOCK																		
LOCK & DAM 51	NO DATA RECORDED FOR THIS LOCK																		
LOCK & DAM 52	1	9	105	1	10	36	1	16	90	1	12	58	:	871	343230	394.1	2105		
LOCK & DAM 52 AUX 1	1	9	90	1	11	46	5	15	60	1	13	65	:	486	263570	542.3	4336		
LOCK & DAM 53	NO DATA RECORDED FOR THIS LOCK																		
CANNELTON LOCK & DAM	1	24	115	1	7	30	5	11	70	1	8	52	:	446	30123	67.5	1440		

[illegible]

CANNELTON LOCK & DAM AUX	1	9	60	1	2	12	5	10	30	1	3	11 :	47	875	18.6	125
NEWBURGH LOCK & DAM	1	14	80	1	8	27	6	8	26	1	9	35 :	495	20257	40.9	275
NEWBURGH LOCK & DAM AUX 1	1	4	43	1	2	22	5	8	18	1	2	27 :	308	2416	7.8	40
UNIONTOWN LOCK & DAM	1	18	97	1	7	25	5	10	47	1	7	49 :	431	19038	44.2	215
UNIONTOWN LOCK & DAM AUX 1	1	4	60	1	1	25	5	9	58	1	1	25 :	195	1987	10.2	550
SMITHLAND LOCK & DAM	1	14	65	1	8	30	1	11	435	1	8	80 :	147	5441	37.0	1250
SMITHLAND LOCK & DAM AUX 1	1	12	50	1	9	30	1	10	115	1	7	30 :	139	9262	66.6	2350

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
TENNESSEE RIVER	01-KENTUCKY LOCK	0600/0110/11.0
	02-PICKWICK LANDING LOCK	1000/0110/11.0
	02-PICKWICK LANDING LOCK AUX	0600/0110/11.0
	03-WILSON LOCK	0600/0110/11.0
	03-WILSON LOCK AUX	0292/0060/11.0
	04-GEN JOS WHEELER LOCK	0600/0110/11.0
	04-GEN JOS WHEELER LK      AUX1	0400/0060/11.0
	05-GUNTERSVILLE LOCK	0600/0110/11.0
	05-GUNTERSVILLE LOCK      AUX 1	0360/0060/11.0
	06-NICKAJAC LOCK	0600/0110/11.0
	07-CHICKAMAUGA LOCK	0360/0060/11.0
	08-WATTS BAR LOCK	0360/0060/11.0
	09-FORT LOUDON LOCK	0360/0060/11.0
CLINCH RIVER	11-MELTON HILL LOCK	0400/0075/11.0
CUMBERLAND RIVER	21-BARKLEY LOCK	0800/0110/11.0
	22-CHEATHAM LOCK	0800/0110/11.0
	23-CORDELL HULL LOCK	0400/0084/11.0
	24-OLD HICKORY LOCK	0400/0084/11.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER					MONTHS REPORTED						
							7/83	8/83			9/83		
RIVER/LOCK NAME		TOMS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
		(NAV, OPN, ETC)											
TENNESSEE RIVER													
KENTUCKY LOCK		***											
UPBOUND STATISTICS		453	179	49	681	1019	3237	4256	694	129	4	827	4796
DOWNBOUND STATISTICS		414	81	59	554	2492	1375	3867	668	89	7	764	1895
TOTALS		867	260	108	1235	3511	4612	8123	1362	218	11	1591	6691
PICKWICK LANDING LOCK		***											
UPBOUND STATISTICS		227	247	15	489	182	2144	2326	333	202	17	552	3127
DOWNBOUND STATISTICS		234	237	12	483	1978	454	2432	342	209	25	576	641
TOTALS		461	484	27	972	2160	2598	4758	675	411	42	1128	3768
PICKWICK LANDING LOCK AUX		NO DATA RECORDED FOR THIS LOCK											
WILSON LOCK		***											
UPBOUND STATISTICS		127	262	64	453	192	921	1113	205	206	8	419	1354
DOWNBOUND STATISTICS		138	257	62	457	803	429	1232	219	204	12	435	587
TOTALS		265	519	126	910	995	1350	2345	424	410	20	854	1941
WILSON LOCK AUX		NO DATA RECORDED FOR THIS LOCK											
GEN JOS WHEELER LOCK		***											
UPBOUND STATISTICS		114	116	6	236	171	889	1060	154	99	4	257	1300
DOWNBOUND STATISTICS		116	103	10	229	756	360	1116	170	81	5	256	493
TOTALS		230	219	16	465	927	1249	2176	324	180	9	513	1793
GEN JOS WHEELER LK		AUX1	***										
UPBOUND STATISTICS		9	284	5	298	6	49	55	15	211	1	227	71
DOWNBOUND STATISTICS		6	275	0	281	50	25	75	8	219	3	230	35
TOTALS		15	559	5	579	56	74	130	23	430	4	457	106
GUNTERSVILLE LOCK		***											
UPBOUND STATISTICS		124	543	4	671	265	716	981	157	223	2	382	1033
DOWNBOUND STATISTICS		126	560	3	689	615	440	1055	159	224	4	387	585
TOTALS		250	1103	7	1360	880	1156	2036	316	447	6	769	1618

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED					
								7/83	8/83		9/83		
RIVER/LOCK NAME		TONS	VESSL RECRTM	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTM	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
TENNESSEE RIVER													
GUNTERSVILLE LOCK		AUX 1	***										
UPBOUND STATISTICS		1	506	2	509	0	1	1	3	264	2	269	0
DOWNBOUND STATISTICS		0	461	0	461	0	0	0	2	266	3	271	0
TOTALS		1	967	2	970	0	1	1	5	530	5	540	0
NICKAJAC LOCK			***										
UPBOUND STATISTICS		150	244	9	403	325	702	1027	180	157	3	340	922
DOWNBOUND STATISTICS		153	203	10	366	619	465	1084	187	141	4	332	623
TOTALS		303	447	19	769	944	1167	2111	367	298	7	672	1545
CHICKAMAUGA LOCK			***										
UPBOUND STATISTICS		66	760	8	834	68	256	324	127	505	40	672	379
DOWNBOUND STATISTICS		62	751	13	826	189	133	322	121	544	42	707	185
TOTALS		128	1511	21	1660	257	389	646	248	1049	82	1379	564
WATTS BAR LOCK			***										
UPBOUND STATISTICS		47	547	0	594	69	118	187	66	448	6	520	188
DOWNBOUND STATISTICS		45	546	1	592	52	121	173	62	432	6	500	158
TOTALS		92	1093	1	1186	121	239	360	128	880	12	1020	346
FORT LOUDON LOCK			***										
UPBOUND STATISTICS		25	285	3	313	17	49	66	34	221	9	264	90
DOWNBOUND STATISTICS		26	257	3	286	36	22	58	34	198	9	241	31
TOTALS		51	542	6	599	53	71	124	68	419	18	505	121
MELTON HILL LOCK			***										
UPBOUND STATISTICS		0	54	0	54	0	0	0	1	42	14	57	0
DOWNBOUND STATISTICS		0	53	0	53	0	0	0	2	41	15	58	0
TOTALS		0	107	0	107	0	0	0	3	83	29	115	0
BARKLEY LOCK			***										
UPBOUND STATISTICS		53	358	4	415	65	343	408	58	186	11	255	507
DOWNBOUND STATISTICS		91	409	3	503	791	28	819	105	233	11	349	35
TOTALS		144	767	7	918	856	371	1227	163	419	22	604	542

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER						MONTHS REPORTED				
								7/83	8/83	9/83		
-----												
RIVER/LOCK NAME	TOMS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
		(NAV, OPN, ETC)										
-----												
CLINCH RIVER												
CNEATHAM LOCK	***											
UPBOUND STATISTICS	96	247	0	343	29	523	552	100	160	14	274	799
DOWNBOUND STATISTICS	96	244	0	340	519	34	553	99	174	11	284	45
TOTALS	192	491	0	683	548	557	1105	199	334	25	558	844
CUMBERLAND RIVER												
CORDELL HULL LOCK	NO DATA RECORDED FOR THIS LOCK											
OLD HICKORY LOCK	***											
UPBOUND STATISTICS	27	572	12	611	10	47	57	43	319	15	377	68
DOWNBOUND STATISTICS	27	593	13	633	42	7	49	42	352	14	408	6
TOTALS	54	1165	25	1244	52	54	106	85	671	29	785	74

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER										MONTHS REPORTED										
												7/83		8/83		9/83						
APPROACH			LOCK ENTRY			PROCESSING TIME (MIN.)			CHAMBER			EXIT			:	DELAYED	DELAY	DELAY	DELAY			
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	VESSELS	TIME	AVG	MAX			
																		:	(IN MINUTES)			
TENNESSEE RIVER																						
KENTUCKY LOCK		1	8	75		1	12	55		12	20	453		1	16	82	:	890	208511	234.3	1055	
PICKWICK LANDING LOCK		1	7	62		1	11	92		6	17	44		1	16	227	:	385	34237	88.9	702	
PICKWICK LANDING LOCK AUX		NO DATA RECORDED FOR THIS LOCK																				
WILSON LOCK		1	9	95		1	11	95		6	22	50		1	11	68	:	313	24524	78.4	1741	
WILSON LOCK AUX		NO DATA RECORDED FOR THIS LOCK																				
GEN JOS WHEELER LOCK		1	12	148		1	11	41		8	14	29		2	15	88	:	109	8292	76.1	1095	
GEN JOS WHEELER LK	AUX	1	7	99		1	4	23		6	13	26		1	5	98	:	131	9722	74.2	1393	
GUNTERSVILLE LOCK		1	6	65		1	7	39		6	14	44		1	10	104	:	305	8222	27.0	290	
GUNTERSVILLE LOCK	AUX	1	2	14		1	2	13		6	12	25		1	2	32	:	206	2387	11.6	600	
NICKAJAC LOCK		1	8	215		1	9	44		7	14	30		1	10	56	:	152	6761	44.5	188	
CHICKAMAUGA LOCK		1	3	113		1	4	30		6	12	72		1	5	114	:	370	17292	46.7	668	
WATTS BAR LOCK		1	6	52		1	4	27		6	15	32		1	4	50	:	299	8447	28.3	567	
FORT LOUDON LOCK		1	9	66		1	4	27		6	23	58		1	4	58	:	152	5677	37.3	260	
MELTON HILL LOCK		1	7	22		1	2	5		10	15	28		1	1	3	:	7	101	14.4	24	
BARKLEY LOCK		1	9	55		1	6	68		2	16	44		1	5	63	:	146	3832	26.2	115	



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
N3	NASHVILLE	OHIO RIVER	7/83	8/83	9/83

APPROACH			LOCK PROCESSING TIME (MIN.)				EXIT			DELATED DELAY		DELAY		DELAY	
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MAX

## CLINCH RIVER

CHEATHAM LOCK	:	6	27	1	7	46	6	16	31	1	6	67	:	128	2759	21.6	219
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## CUMBERLAND RIVER

CORDELL HULL LOCK	NO DATA RECORDED FOR THIS LOCK															
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OLD HICKORY LOCK	1	3	44	1	3	44	6	16	31	1	3	23	:	243	3208	13.2	78
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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OHIO RIVER	01-EMSWORTH LOCK & DAM	0600/0110/13.0
	01-EMSWORTH LOCK & DAM AUX 1	0360/0056/13.0
	02-DASHIELDS LOCK & DAM	0600/0110/13.0
	02-DASHIELDS LOCK & DAM AUX 1	0360/0056/13.0
	03-MONTGOMERY LOCK & DAM	0600/0110/13.0
	03-MONTGOMERY LOCK & DAM AUX 1	0360/0056/13.0
	04-NEW CUMBERLAND LOCK & DAM	1200/0110/13.0
	04-NEW CUMBERLAND LK & DAM AUX 1	0600/0110/13.0
	05-PIKE ISLAND LOCK & DAM	1200/0110/13.0
	05-PIKE ISLAND LOCK & DAM AUX 1	0600/0110/13.0
MONONGAHELA RIVER	22-LOCK & DAM 2	0720/0110/13.0
	22-LOCK & DAM 2 AUX 1	0360/0056/13.0
	23-LOCK & DAM 3	0720/0056/13.0
	23-LOCK & DAM 3 AUXILIARY 1	0360/0056/13.0
	24-LOCK & DAM 4	0720/0056/13.0
	24-LOCK & DAM 4 AUXILIARY 1	0360/0056/13.0
	25-MAXWELL LOCK & DAM	0720/0084/13.0
	25-MAXWELL LOCK & DAM AUX 1	0720/0084/13.0
	27-LOCK & DAM 7	0360/0056/13.0
	28-LOCK & DAM 8	0360/0056/13.0
ALLEGHENY RIVER	29-MORGANTOWN LOCK & DAM	0600/0084/13.0
	30-HILDEBRAND LOCK & DAM	0600/0084/13.0
	31-OPEKISKA LOCK & DAM	0600/0084/13.0
	42-LOCK & DAM 2	0360/0056/13.0
	43-LOCK & DAM 3	0360/0056/13.0
	44-LOCK & DAM 4	0360/0056/13.0
	45-LOCK & DAM 5	0360/0056/13.0
	46-LOCK & DAM 6	0360/0056/13.0
	47-LOCK & DAM 7	0360/0056/13.0
	48-LOCK & DAM 8	0360/0056/13.0
OHIO RIVER	49-LOCK & DAM 9	0360/0056/13.0
	71-HANNIBAL LOCKS & DAM	1200/0110/13.0
	71-HANNIBAL LOCKS & DAM AUX 1	0600/0110/13.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER						MONTHS REPORTED					
								7/83	8/83		9/83		
RIVER/LOCK NAME		TOWS	VESSEL RECRTN	VESSEL OTHER	VESSEL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
OHIO RIVER													
ENSWORTH LOCK & DAM		***											
UPBOUND STATISTICS		390	222	57	669	946	1205	2151	472	75	3	550	1407
DOWNBOUND STATISTICS		393	205	61	659	871	1276	2147	473	72	3	548	1403
TOTALS		783	427	118	1328	1817	2481	4298	945	147	6	1098	2810
ENSWORTH LOCK & DAM AUX 1		***											
UPBOUND STATISTICS		149	338	40	533	312	335	647	295	244	30	569	366
DOWNBOUND STATISTICS		151	329	43	523	276	399	675	314	269	23	606	415
TOTALS		300	667	89	1056	588	734	1322	609	513	53	1175	781
DASHIELDS LOCK & DAM		***											
UPBOUND STATISTICS		419	5	12	436	1205	1479	2684	475	2	1	478	1694
DOWNBOUND STATISTICS		432	7	11	450	1121	1639	2760	483	5	2	490	1780
TOTALS		851	12	23	886	2326	3118	5444	958	7	3	968	3474
DASHIELDS LOCK & DAM AUX 1		***											
UPBOUND STATISTICS		87	476	81	644	57	61	118	187	302	5	494	66
DOWNBOUND STATISTICS		76	470	83	629	79	29	108	182	325	9	515	32
TOTALS		163	946	164	1273	136	90	226	369	627	14	1010	98
MONTGOMERY LOCK & DAM		***											
UPBOUND STATISTICS		401	18	12	431	1116	1609	2725	498	14	4	516	2016
DOWNBOUND STATISTICS		407	15	12	434	1238	1648	2886	496	11	3	510	1890
TOTALS		808	33	24	865	2354	3257	5611	994	25	7	1026	3906
MONTGOMERY LOCK & DAM AUX 1		***											
UPBOUND STATISTICS		67	656	83	806	53	37	90	164	359	2	525	37
DOWNBOUND STATISTICS		55	658	96	809	52	14	66	168	380	5	553	17
TOTALS		122	1314	179	1615	105	51	156	332	739	7	1078	54
NEW CUMBERLAND LOCK & DAM		***											
UPBOUND STATISTICS		287	9	2	298	347	2077	2424	288	4	0	292	2997
DOWNBOUND STATISTICS		269	10	5	284	1351	1064	2415	270	6	1	277	1304
TOTALS		556	19	7	582	1698	3141	4839	558	10	1	569	4301

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
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EROC HA	DISTRICT NAME	DIVISION NAME						MONTHS REPORTED				
	PITTSBURGH	OHIO RIVER						7/83	8/83		9/83	
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL		TOTAL	COMMER	RECRTN	OTHER	
(NAV, OPN, ETC)												
-----												
OHIO RIVER												
NEW CUMBERLAND LK & DAM AUX 1	***											
UPBOUND STATISTICS	113	401	32	546	185	160	345	151	244	5	400	215
DOWNBOUND STATISTICS	140	412	19	571	250	171	421	162	263	6	431	166
TOTALS	253	813	51	1117	435	331	766	313	507	11	831	381
PIKE ISLAND LOCK & DAM	***											
UPBOUND STATISTICS	328	17	8	353	368	2612	2980	335	13	0	348	3838
DOWNBOUND STATISTICS	309	24	5	338	1650	1229	2879	310	16	1	327	1661
TOTALS	637	41	13	691	2018	3841	5859	645	29	1	675	5499
PIKE ISLAND LOCK & DAM AUX 1	***											
UPBOUND STATISTICS	105	369	38	512	136	160	296	147	231	4	382	197
DOWNBOUND STATISTICS	145	383	20	548	253	164	417	170	247	5	422	154
TOTALS	250	752	58	1060	389	324	713	317	478	9	804	351
MONONGAHELA RIVER												
LOCK & DAM 2	***											
UPBOUND STATISTICS	419	41	3	463	1850	712	2562	436	26	1	463	887
DOWNBOUND STATISTICS	438	40	8	486	432	2144	2576	466	24	1	491	2237
TOTALS	857	81	11	949	2282	2856	5138	902	50	2	954	3124
LOCK & DAM 2 AUX 1	***											
UPBOUND STATISTICS	155	571	61	787	101	153	254	221	364	5	590	99
DOWNBOUND STATISTICS	124	591	62	777	159	43	202	192	379	4	575	45
TOTALS	279	1162	123	1564	260	196	456	413	743	9	1165	144
LOCK & DAM 3	***											
UPBOUND STATISTICS	714	3	5	722	3216	433	3649	717	0	0	717	519
DOWNBOUND STATISTICS	747	2	3	752	305	3401	3706	748	0	1	749	3365
TOTALS	1461	5	8	1474	3521	3834	7355	1465	0	1	1466	3884

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FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER	MONTHS REPORTED										
			7/83			8/83			9/83				
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)
MONONGAHELA RIVER													
LOCK & DAM 3 AUXILIARY 1		***											
UPBOUND STATISTICS		137	542	120	799	175	55	230	255	303	0	558	56
DOWNBOUND STATISTICS		100	536	140	776	70	84	154	232	318	1	551	84
TOTALS		237	1078	260	1575	245	139	384	487	621	1	1109	140
LOCK & DAM 4		***											
UPBOUND STATISTICS		560	4	9	573	2847	343	3190	596	3	1	600	360
DOWNBOUND STATISTICS		585	1	6	592	235	2958	3193	608	1	1	610	2878
TOTALS		1145	5	15	1165	3082	3301	6383	1204	4	2	1210	3238
LOCK & DAM 4 AUXILIARY 1		***											
UPBOUND STATISTICS		40	461	57	558	52	19	71	94	324	3	421	14
DOWNBOUND STATISTICS		26	491	58	575	32	14	46	82	339	3	424	15
TOTALS		66	952	115	1133	84	33	117	176	663	6	845	29
MAXWELL LOCK & DAM		***											
UPBOUND STATISTICS		433	417	9	859	2285	172	2457	442	221	3	666	199
DOWNBOUND STATISTICS		104	399	3	506	29	573	602	108	244	2	354	560
TOTALS		537	816	12	1365	2314	745	3059	550	465	5	1020	759
MAXWELL LOCK & DAM AUX 1		***											
UPBOUND STATISTICS		100	442	6	548	465	85	550	106	232	0	338	91
DOWNBOUND STATISTICS		429	467	6	902	128	2264	2392	435	226	0	661	2206
TOTALS		529	909	12	1450	593	2349	2942	541	458	0	999	2297
LOCK & DAM 7		***											
UPBOUND STATISTICS		483	116	19	618	2026	214	2240	833	127	5	965	242
DOWNBOUND STATISTICS		485	122	19	626	172	2057	2229	843	139	5	987	1950
TOTALS		968	238	38	1244	2198	2271	4469	1676	266	10	1952	2192
LOCK & DAM 8		***											
UPBOUND STATISTICS		422	76	20	518	1741	231	1972	749	76	6	831	259
DOWNBOUND STATISTICS		420	78	22	520	178	1777	1955	753	90	6	849	1688
TOTALS		842	154	42	1038	1919	2008	3927	1502	166	12	1680	1947

RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)
											(NAV, OPN, ETC)	

MORGANTOWN LOCK & DAM	***											
UPBOUND STATISTICS	48	148	7	203	228	16	244	57	130	1	188	14
DOWNBOUND STATISTICS	49	161	4	214	13	220	233	54	131	2	187	210
TOTALS	97	309	11	417	241	236	477	111	261	3	375	224

HILDEBRAND LOCK & DAM	***											
UPBOUND STATISTICS	22	139	9	170	38	10	48	32	116	1	149	9
DOWNBOUND STATISTICS	21	145	8	174	10	38	48	30	124	1	155	41
TOTALS	43	284	17	344	48	48	96	62	240	2	304	50

OPEKISA LOCK & DAM	***											
UPBOUND STATISTICS	14	298	11	323	6	10	16	27	232	0	259	9
DOWNBOUND STATISTICS	13	305	12	330	10	5	15	27	245	0	272	5
TOTALS	27	603	23	653	16	15	31	54	477	0	531	14

LOCK & DAM 2	***											
UPBOUND STATISTICS	266	2474	28	2768	533	270	803	383	1097	4	1484	314
DOWNBOUND STATISTICS	267	2486	30	2783	299	510	809	388	1070	3	1461	251
TOTALS	533	4960	58	5551	832	780	1612	771	2167	7	2945	565

LOCK & DAM 3	***											
UPBOUND STATISTICS	262	1494	31	1787	534	290	824	316	810	11	1137	341
DOWNBOUND STATISTICS	267	1499	17	1783	323	505	828	318	762	7	1087	240
TOTALS	529	2993	48	3570	857	795	1652	634	1572	18	2224	581

LOCK & DAM 4	***											
UPBOUND STATISTICS	184	1559	14	1757	636	60	696	211	763	3	977	85
DOWNBOUND STATISTICS	186	1548	12	1746	65	631	696	212	672	3	887	283
TOTALS	370	3107	26	3503	701	691	1392	423	1435	6	1864	368

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INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH	DIVISION NAME OHIO RIVER						MONTHS REPORTED					9/83
								7/83	8/83				
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL (NAV, OPN, ETC)	TONNAGE (KTONS)	
ALLEGHENY RIVER													
LOCK & DAM 5	***												
UPBOUND STATISTICS	144	1020	0	1164	609	6	615	150	559	2	711	2	
DOWNBOUND STATISTICS	144	1009	0	1153	9	608	617	151	557	3	711	257	
TOTALS	288	2029	0	2317	618	614	1232	301	1116	5	1422	259	
LOCK & DAM 6	***												
UPBOUND STATISTICS	145	483	2	630	616	6	622	154	313	3	470	2	
DOWNBOUND STATISTICS	143	468	1	612	6	609	615	154	309	3	466	257	
TOTALS	288	951	3	1242	622	615	1237	308	622	6	936	259	
LOCK & DAM 7	***												
UPBOUND STATISTICS	35	402	7	444	65	7	72	44	244	2	290	2	
DOWNBOUND STATISTICS	37	411	5	453	9	65	74	43	279	2	324	28	
TOTALS	72	813	12	897	74	72	146	87	523	4	614	30	
LOCK & DAM 8	***												
UPBOUND STATISTICS	0	392	0	392	0	0	0	2	224	1	227	0	
DOWNBOUND STATISTICS	0	414	0	414	0	0	0	1	266	2	269	0	
TOTALS	0	806	0	806	0	0	0	3	490	3	496	0	
LOCK & DAM 9	***												
UPBOUND STATISTICS	0	323	0	323	0	0	0	1	190	0	191	0	
DOWNBOUND STATISTICS	0	328	0	328	0	0	0	2	198	0	200	0	
TOTALS	0	651	0	651	0	0	0	3	388	0	391	0	
OHIO RIVER													
HANNIBAL LOCKS & DAM	***	ONLY FIRST AND SECOND MONTHS REPORTED											
UPBOUND STATISTICS	179	3	2	184	643	1171	1814	181	2	0	183	1750	
DOWNBOUND STATISTICS	178	13	0	191	686	1177	1863	179	8	2	189	1485	
TOTALS	357	16	2	375	1329	2348	3677	360	10	2	372	3235	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BAR6S	BAR6S	BAR6S	LOCK6S	LCK6S	LCK6S	LCK6S	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												

## OHIO RIVER

HANNIBAL LOCKS & DAM AUX 1	***											
UPBOUND STATISTICS	193	173	12	378	738	1065	1803	271	144	34	449	1589
DOWNBOUND STATISTICS	198	187	7	392	552	1274	1826	270	167	31	468	1571
TOTALS	391	360	19	770	1290	2339	3629	541	311	65	917	3160



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER									MONTHS REPORTED 7/83                      8/83                      9/83					
				LOCK PROCESSING TIME (MIN.)									:	DELAYED	DELAY	DELAY	DELAY	
	APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS	TIME	AVG	MAX	
MIN    AVG    MAX			:	MIN    AVG    MAX	:	MIN    AVG    MAX	:	MIN    AVG    MAX	:	MIN    AVG    MAX	:				(IN MINUTES)			
OHIO RIVER																		
ENSWORTH LOCK & DAM			1	10	60	1	6	30	7	15	41	2	8	70 :	543	33526	61.7	645
ENSWORTH LOCK & DAM AUX 1			1	5	52	1	4	18	5	10	30	1	4	31 :	438	36619	83.6	662
DASHIELDS LOCK & DAM			1	14	58	1	8	58	5	11	40	1	10	46 :	314	15324	48.8	276
DASHIELDS LOCK & DAM AUX 1			1	7	35	1	2	21	5	6	20	1	2	21 :	239	2352	9.8	72
MONTGOMERY LOCK & DAM			1	11	95	1	9	49	5	13	50	2	13	80 :	345	21870	63.4	375
MONTGOMERY LOCK & DAM AUX 1			1	4	30	1	3	30	5	10	25	1	3	15 :	354	2708	7.6	35
NEW CUMBERLAND LOCK & DAM			1	19	54	1	6	34	5	15	60	2	12	35 :	134	5137	38.3	330
NEW CUMBERLAND LK & DAM AUX			1	9	57	1	2	17	5	12	28	1	7	33 :	204	3401	16.7	374
PIKE ISLAND LOCK & DAM			1	16	56	1	8	31	6	12	24	1	10	45 :	159	5986	37.6	108
PIKE ISLAND LOCK & DAM AUX 1			1	8	40	1	3	19	5	11	23	1	6	20 :	192	3114	16.2	67
MONONGAHELA RIVER																		
LOCK & DAM 2			1	12	52	1	6	26	6	10	32	1	6	38 :	256	7916	30.9	315
LOCK & DAM 2 AUX 1			1	6	47	1	2	12	5	6	24	1	2	21 :	282	2739	9.7	60
LOCK & DAM 3			1	11	49	2	6	20	7	10	26	1	7	20 :	632	21368	33.8	195
LOCK & DAM 3 AUXILIARY 1			1	6	33	1	2	20	5	8	17	1	2	16 :	285	3199	11.2	67
LOCK & DAM 4			1	11	43	1	6	25	5	10	33	2	8	30 :	385	13583	35.3	150

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC H4	DISTRICT NAME PITTSBURGH			DIVISION NAME OHIO RIVER							MONTHS REPORTED 7/83                      8/83                      9/83							
	<hr/>																	
	APPROACH			LOCK PROCESSING TIME (MIN.)							:		DELAYED VESSELS	DELAY TIME	DELAY AVG	DELAY MAX		
ENTRY				CHAMBER			EXIT											
MIN    AVG    MAX			:	MIN    AVG    MAX	:	MIN    AVG    MAX	:	MIN    AVG    MAX	:	(IN MINUTES)								
<hr/>																		
MONONGAHELA RIVER																		
LOCK & DAM 4 AUXILIARY 1	1	6	38	1	2	13	5	9	23	1	3	21	:	210	2490	11.9	87	
MAXWELL LOCK & DAM	1	7	40	1	5	19	6	10	35	1	6	30	:	253	2291	9.1	50	
MAXWELL LOCK & DAM AUX 1	1	8	35	1	5	48	7	11	39	1	7	25	:	276	2903	10.5	52	
LOCK & DAM 7	1	5	55	1	4	21	5	6	18	1	8	39	:	459	18211	39.7	186	
LOCK & DAM 8	1	6	76	1	4	37	5	6	16	1	9	53	:	375	17238	46.0	612	
MORGANTOWN LOCK & DAM	1	5	18	1	4	10	6	10	30	1	3	10	:	27	88	3.3	10	
HILDEBRAND LOCK & DAM	1	4	15	1	2	16	6	11	35	1	3	15	:	24	185	7.7	18	
OPEKISKA LOCK & DAM	1	4	16	1	2	10	5	10	20	1	3	6	:	59	683	11.6	27	
ALLEGHENY RIVER																		
LOCK & DAM 2	1	3	30	1	3	34	5	7	19	1	4	29	:	1628	17296	10.6	122	
LOCK & DAM 3	1	3	31	1	3	26	6	7	20	1	3	31	:	925	12504	13.5	608	
LOCK & DAM 4	1	3	35	1	3	28	5	8	24	1	3	29	:	933	8287	8.9	480	
LOCK & DAM 5	1	2	10	1	2	20	5	8	58	1	2	13	:	353	1866	5.3	47	
LOCK & DAM 6	1	3	9	1	3	8	6	7	10	1	4	17	:	372	3399	9.1	33	
LOCK & DAM 7	1	2	8	1	1	15	6	7	16	1	2	11	:	256	2028	7.9	22	
LOCK & DAM 8	1	3	9	1	2	7	6	8	18	2	2	7	:	253	1850	7.3	20	
LOCK & DAM 9	1	3	10	1	1	4	5	9	11	1	1	2	:	190	1283	6.8	19	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
H4	PITTSBURGH	OHIO RIVER	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY	
APPROACH			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX	
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	: (IN MINUTES)					

OHIO RIVER

HANNIBAL LOCKS & DAM	1	15	55	1	9	19	6	16	33	1	11	32	:	103	3684	35.8	124
HANNIBAL LOCKS & DAM AUX 1	1	11	68	1	7	30	5	16	39	1	12	55	:	333	40199	120.7	1277

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K3	JACKSONVILLE	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
OKEECHOBEE WATERWAY	01-ST LUCIE LOCK & DAM	0275/0050/14.0
	02-MOORE HAVEN LOCK	0275/0050/11.0
	03-ORTONA LOCK & DAM	0275/0050/12.0
	04-W P FRANKLIN LCK & CTRL STRCT	0450/0056/14.0
	05-PORT MAYACA LOCK	0450/0056/14.0
CROSS FLA BRG CNL	11-HENRY HOLLAND BUCKMAN LOCK	0600/0084/15.0
	12-EUREKA LOCK	0600/0084/15.0
	13-INGLIS LOCK	0600/0084/15.0
CANAVERAL HARBOR	21-CANAVERAL LOCK	0600/0090/15.0
OKLAHAMA RIVER	31-MOSS BLUFF LOCK & DAM	0156/0030/****

NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC KS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED		
			7/83	8/83	9/83
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT (FT/FT/FT)		
BLKMAR/TOMBIGBEE RI	01-COFFEEVILLE LOCK		0600/0110/12.0		
	02-DENOPOLIS LOCK & DAM		0600/0110/12.0		
	03-WARRIOR LOCK & DAM		0600/0110/12.0		
	04-WILLIAM BACON OLIVER LK & DM		0600/0095/12.0		
	05-MOLT LOCK & DAM		0600/0110/12.0		
	06-John HOLLIS BANKHEAD LK & DM		0600/0110/12.0		
ALABAMA-COOSA RIVERS	11-CLAIBORNE LOCK & DAM		0600/0084/12.0		
	12-MILLERS FERRY LOCK & DAM		0600/0084/12.0		
	13-JONES BLUFF LOCK & DAM		0600/0084/12.0		
APLCH/CHTCH/FLNT RI	21-JIM WOODRUFF LOCK & DAM		0450/0082/12.0		
	22-GEORGE W ANDREWS LOCK & DAM		0450/0082/12.0		
	23-WALTER F GEORGE LOCK & DAM		0450/0082/12.0		
TEHN TOMBIGBEE WATERWAY	41-GAINESVILLE LOCK & DAM		0600/0110/12.0		
	42-ALICEVILLE LOCK & DAM		0600/0110/12.0		
	43-COLUMBUS LOCK & DAM		0600/0110/12.0		
	44-ABERDEEN LOCK & DAM		0600/0110/12.0		
PEARL RIVER	31-LOCK 1		0310/0065/ 9.0		
	32-LOCK 2		0310/0065/ 9.0		
	33-LOCK 3		0310/0065/ 9.0		

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC K5	DISTRICT NAME MOBILE		DIVISION NAME SOUTH ATLANTIC				MONTHS REPORTED						
							7/83	8/83			9/83		
-----													
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE	
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	(KTONS)	
-----													
(NAV, OPN, ETC)													
-----													
BLKNAR/TOMBIGBEE RI													
COFFEEVILLE LOCK	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	86	59	3	148	312	37	349	89	35	6	130	252	
DOWNBOUND STATISTICS	67	46	1	114	18	233	251	69	31	14	114	2370	
TOTALS	153	105	4	262	330	270	600	158	66	20	244	2622	
DEMOPOLIS LOCK & DAM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	80	23	9	112	297	35	332	86	18	1	105	270	
DOWNBOUND STATISTICS	74	21	4	99	23	291	314	80	13	4	97	2313	
TOTALS	154	44	13	211	320	326	646	166	31	5	202	2583	
WARRIOR LOCK & DAM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	60	0	5	65	255	27	282	64	0	0	64	224	
DOWNBOUND STATISTICS	56	2	0	58	16	216	232	58	1	4	63	2413	
TOTALS	116	2	5	123	271	243	514	122	1	4	127	2637	
WILLIAM BACON OLIVER LK & DM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	49	12	6	67	209	18	227	74	11	8	93	140	
DOWNBOUND STATISTICS	55	14	9	78	16	245	261	96	9	7	112	2368	
TOTALS	104	26	15	145	225	263	488	170	20	15	205	2508	
HOLT LOCK & DAM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	47	48	5	100	245	12	257	52	6	0	58	118	
DOWNBOUND STATISTICS	48	85	4	137	9	244	253	53	6	0	59	2326	
TOTALS	95	133	9	237	254	256	510	105	12	0	117	2444	
JOHN HOLLIS BANKHEAD LK & DM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	27	10	0	37	112	14	126	27	5	0	32	131	
DOWNBOUND STATISTICS	22	5	3	30	5	83	88	26	2	0	28	1580	
TOTALS	49	15	3	67	117	97	214	53	7	0	60	1711	
ALABAMA-COOSA RIVERS													
CLAIBORNE LOCK & DAM	***	ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	20	245	3	268	68	4	72	24	245	1	270	12	
DOWNBOUND STATISTICS	23	234	2	259	1	71	72	26	234	0	260	360	
TOTALS	43	479	5	527	69	75	144	50	479	1	530	372	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC K5	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED									
			7/83		8/83		9/83					
RIVER/LOCK NAME												
TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN	LCKGES OTHER	LCKGES TOTAL	TONNAGE (KTONS)	
(NAV, OPN, ETC)												
ALABAMA-COOSA RIVERS												
MILLERS FERRY LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	12	7	0	19	32	5	37	13	5	1	19	6
DOWNBOUND STATISTICS	10	11	1	22	0	30	30	12	8	2	22	143
TOTALS	22	18	1	41	32	35	67	25	13	3	41	149
JONES BLUFF LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	1	22	0	23	0	2	2	2	15	1	18	4
DOWNBOUND STATISTICS	1	17	0	18	0	1	1	4	11	0	15	1
TOTALS	2	39	0	41	0	3	3	6	26	1	33	5
APLCH/CHTCH/FLNT RI												
JIM WOODRUFF LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	22	64	1	87	28	15	43	25	36	0	61	85
DOWNBOUND STATISTICS	22	112	1	135	15	29	44	23	57	1	81	82
TOTALS	44	176	2	222	43	44	87	48	93	1	142	167
GEORGE W ANDREWS LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	16	41	2	59	25	10	35	19	33	1	53	40
DOWNBOUND STATISTICS	17	68	1	86	10	29	39	19	43	0	62	48
TOTALS	33	109	3	145	35	39	74	38	76	1	115	88
WALTER F GEORGE LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	4	55	0	59	1	3	4	6	31	0	37	13
DOWNBOUND STATISTICS	3	82	1	86	3	0	3	5	42	0	47	0
TOTALS	7	137	1	145	4	3	7	11	73	0	84	13
TENN TOMBIGBEE WATERWAY												
GAINESVILLE LOCK & DAM												
*** ONLY FIRST MONTH REPORTED												
UPBOUND STATISTICS	7	58	1	66	12	2	14	9	45	8	62	13
DOWNBOUND STATISTICS	7	55	1	63	6	10	16	12	42	6	60	55
TOTALS	14	113	2	129	18	12	30	21	87	14	122	68

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC KS	DISTRICT NAME MOBILE	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED			
			7/83	8/83	9/83	

RIVER/LOCK NAME	TOMS	VESSEL	VESSEL	VESSEL	BARGE	BARGE	BARGE	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTM	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTM	OTHER	TOTAL	

(NAV, OPN, ETC)

TENN TOMBIGBEE WATERWAY

	*** ONLY FIRST MONTH REPORTED											
ALICEVILLE LOCK & DAM												
UPBOUND STATISTICS	3	253	0	256	3	1	4	4	187	5	196	1
DOWNBOUND STATISTICS	4	255	1	260	6	4	10	6	185	5	196	10
TOTALS	7	508	1	516	9	5	14	10	372	10	392	11

	*** ONLY FIRST MONTH REPORTED											
COLUMBUS LOCK & DAM												
UPBOUND STATISTICS	2	147	1	150	1	1	2	7	102	4	113	1
DOWNBOUND STATISTICS	3	152	0	155	0	4	4	7	107	6	120	7
TOTALS	5	299	1	305	1	5	6	14	209	10	233	8

ABERDEEN LOCK & DAM NO DATA RECORDED FOR THIS LOCK

PEARL RIVER

LOCK 1 NO DATA RECORDED FOR THIS LOCK

LOCK 2 NO DATA RECORDED FOR THIS LOCK

LOCK 3 NO DATA RECORDED FOR THIS LOCK



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC K5	DISTRICT NAME MOBILE			DIVISION NAME SOUTH ATLANTIC									MONTHS REPORTED									
													7/83			8/83			9/83			
	APPROACH			LOCK PROCESSING TIME (MIN.)			ENTRY			CHAMBER			EXIT			: DELAYED DELAY	DELAY	DELAY	DELAY			
MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: MIN	AVG	MAX	: VESSELS TIME	TIME	AVG	MAX				
															(IN MINUTES)							
BLKNAR/TOMBIGBEE RI																						
COFFEEVILLE LOCK	1	7	30	1	3	16	6	13	21	1	6	21	:	68	2006	29.5	146					
DENOPOLIS LOCK & DAM	1	11	31	1	4	16	5	13	18	2	10	24	:	57	2135	37.5	150					
WARRIOR LOCK & DAM	1	13	47	1	4	21	6	15	26	1	9	44	:	44	10658	242.2	4254					
WILLIAM BACON OLIVER LK & DM	1	13	54	1	6	24	5	13	28	1	13	85	:	65	7596	116.9	393					
MOLT LOCK & DAM	1	11	35	1	7	35	8	19	38	1	8	24	:	34	1994	58.6	256					
JOHN HOLLIS BANKHEAD LK & DM	2	9	35	2	7	20	10	13	26	2	7	20	:	37	4389	118.6	400					
ALABAMA-COOSA RIVERS																						
CLAIBORNE LOCK & DAM	1	3	23	1	1	11	5	10	31	1	3	10	:	2	11	5.5	10					
MILLERS FERRY LOCK & DAM	1	9	45	1	5	14	11	15	26	2	5	13	:	0	0	0.0	0					
JONES BLUFF LOCK & DAM	1	2	7	1	2	5	10	15	23	1	3	8	:	0	0	0.0	0					
APLCH/CHTCH/FLNT RI																						
JIM WOODRUFF LOCK & DAM	2	3	11	2	3	17	8	11	20	1	3	12	:	2	54	27.0	33					
GEORGE W ANDREWS LOCK & DAM	1	2	4	1	2	12	5	14	22	1	2	5	:	1	3	3.0	3					
WALTER F GEORGE LOCK & DAM	1	2	10	1	3	11	12	15	45	1	3	7	:	3	40	13.3	14					
TENN TOMBIGBEE WATERWAY																						
GAINESVILLE LOCK & DAM	1	4	37	1	2	13	7	11	23	1	2	23	:	5	33	6.6	15					
ALICEVILLE LOCK & DAM	1	1	15	1	1	11	5	12	31	1	1	11	:	86	835	9.7	27					
COLUMBUS LOCK & DAM	1	2	25	1	1	15	6	13	27	1	1	9	:	5	94	18.8	35					

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K5	MOBILE	SOUTH ATLANTIC	7/83	8/83	9/83

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LOCK PROCESSING TIME (MIN.)												:	DELAYED DELAY	DELAY	DELAY	
APPROACH			ENTRY			CHAMBER			EXIT			:	VESSELS TIME	AVG	MAX	
MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:	(IN MINUTES)

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TENN TOMBIGBEE WATERWAY

ABERDEEN LOCK & DAM      NO DATA RECORDED FOR THIS LOCK

PEARL RIVER

LOCK 1      NO DATA RECORDED FOR THIS LOCK

LOCK 2      NO DATA RECORDED FOR THIS LOCK

LOCK 3      NO DATA RECORDED FOR THIS LOCK

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED	
K6	SAVANNAH	SOUTH ATLANTIC	7/83	8/83
				9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SAVANNAH RIVER	01-NEW SAVANNAH BLUFF LOCK & DAM	0360/0056/12.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K6	SAVANNAH	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER/LOCK NAME	TOWS	VESSL		VESSL TOTAL	BARGS		BARGS TOTAL	LOCKGS COMMER	LCKGES			LCKGES TOTAL	TONNAGE (KTONS)
		RECRTN	OTHER		EMPTY	FULL			RECRTN	OTHER			

(NAV, OPM, ETC)

## SAVANNAH RIVER

NEW SAVANNAH BLUFF LOCK & DAM	*** ONLY FIRST MONTH REPORTED											
UPBOUND STATISTICS	0	4	0	4	0	0	0	0	2	0	2	0
DOWNBOUND STATISTICS	0	5	0	5	0	0	0	0	5	0	5	0
TOTALS	0	9	0	9	0	0	0	0	7	0	7	0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC K6	DISTRICT NAME SAVANNAH	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED																																																								
			7/83	8/83	9/83																																																						
<table border="1"> <thead> <tr> <th colspan="12">LOCK PROCESSING TIME (MIN.)</th> <th colspan="2">: DELAYED DELAY</th> <th colspan="2">DELAY</th> <th colspan="2">DELAY</th> </tr> <tr> <th colspan="3">APPROACH</th> <th colspan="3">ENTRY</th> <th colspan="3">CHAMBER</th> <th colspan="3">EXIT</th> <th colspan="2">: VESSELS TIME</th> <th colspan="2">AVG</th> <th colspan="2">MAX</th> </tr> <tr> <th>MIN</th> <th>AVG</th> <th>MAX</th> <th>MIN</th> <th>AVG</th> <th>MAX</th> <th>MIN</th> <th>AVG</th> <th>MAX</th> <th>MIN</th> <th>AVG</th> <th>MAX</th> <th>MIN</th> <th>AVG</th> <th>MAX</th> <th colspan="3">(IN MINUTES)</th> </tr> </thead> </table>						LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY		APPROACH			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX		MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(IN MINUTES)		
LOCK PROCESSING TIME (MIN.)												: DELAYED DELAY		DELAY		DELAY																																											
APPROACH			ENTRY			CHAMBER			EXIT			: VESSELS TIME		AVG		MAX																																											
MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	(IN MINUTES)																																												
SAVANNAH RIVER																																																											
NEW SAVANNAH BLUFF LOCK & DA						5	6	10	3	4	5	10	11	13	5	6	8	:	0	0	0.0	0																																					

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
CAPE FEAR RIVER	01-LOCK & DAM 1	0200/0040/10.0
	02-LOCK & DAM 2	0200/0040/10.0
	03-WILLIAM O HUSKE LOCK & DAM	0300/0040/10.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC K7	DISTRICT NAME WILMINGTON	DIVISION NAME SOUTH ATLANTIC	MONTHS REPORTED									
			7/83			8/83			9/83			
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGS	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	
(NAV, OPN, ETC)												
-----												
CAPE FEAR RIVER												
LOCK & DAM 1	***											
UPBOUND STATISTICS	2	26	0	28	0	2	2	3	6	0	9	1
DOWNBOUND STATISTICS	2	58	0	60	2	0	2	3	14	1	18	0
TOTALS	4	84	0	88	2	2	4	6	20	1	27	1
LOCK & DAM 2	***											
UPBOUND STATISTICS	2	24	13	39	0	2	2	19	12	1	32	1
DOWNBOUND STATISTICS	2	66	13	81	2	0	2	18	15	2	35	0
TOTALS	4	90	26	120	2	2	4	37	27	3	67	1
WILLIAM O HUSKE LOCK & DAM	***											
UPBOUND STATISTICS	2	23	0	25	0	2	2	3	10	0	13	1
DOWNBOUND STATISTICS	2	34	0	36	2	0	2	2	14	0	16	0
TOTALS	4	57	0	61	2	2	4	5	24	0	29	1

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
K7	WILMINGTON	SOUTH ATLANTIC	7/83	8/83	9/83

LOCK PROCESSING TIME (MIN.)												:	DELAYED	DELAY	DELAY	DELAY				
APPROACH				ENTRY				CHAMBER				EXIT				:	VESSELS	TIME	AVG	MAX
MIN	AVG	MAX	Z	IN	AVG	MAX	:	MIN	AVG	MAX	:	MIN	AVG	MAX	:					
																(IN MINUTES)				

## CAPE FEAR RIVER

LOCK & DAM 1	5	5	5	5	5	15	5	14	15	5	5	5 :	3	15	5.0	5
LOCK & DAM 2	5	5	5	5	5	5	5	8	20	5	7	10 :	63	313	5.0	5
WILLIAM O HUSKE LOCK & DAM	4	4	5	5	5	5	30	30	30	5	5	5 :	0	0	0.0	0



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERIC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
L2	SACRAMENTO	SOUTH PACIFIC	7/83	8/83	9/83

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RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
SCRMNTO DWSHP CHNL	01-BARGE CANAL LOCK	0640/0086/23.0

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NO DATA RECORDED ON SUMMARY FILE FOR THIS PERIOD

NO DATA RECORDED ON LOCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M3	GALVESTON	SOUTHWESTERN	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
GULF INTRACOASTAL	11-COLORADO RIVER EAST LOCK	1200/0075/15.0
	12-COLORADO RIVER WEST LOCK	1200/0075/15.0
	13-BRAZOS EAST GATE	9999/0075/15.0
	14-BRAZOS WEST GATE	9999/0075/15.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
M4	LITTLE ROCK	SOUTHWESTERN	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	01-NORRELL LOCK & DAM	0600/0110/12.0
	02-LOCK & DAM 2	0600/0110/12.0
	03-LOCK & DAM 3	0600/0110/12.0
	04-LOCK & DAM 4	0600/0110/12.0
	05-LOCK & DAM 5	0600/0110/12.0
	06-DAVID D TERRY LOCK & DAM	0600/0110/12.0
	07-MURRAY LOCK & DAM	0600/0110/12.0
	08-TOAD SUCK FERRY LOCK & DAM	0600/0110/12.0
	09-LOCK & DAM 9	0600/0110/12.0
	10-DARDANELLE LOCK & DAM	0600/0110/12.0
	11-OZARK LOCK & DAM	0600/0110/12.0
	13-LOCK & DAM 13	0600/0110/12.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/83		8/83		9/83					
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)	
ARKANSAS RIVER												
NORRELL LOCK & DAM	***											
UPBOUND STATISTICS	188	53	42	283	553	356	909	223	40	20	283	478
DOWBOUND STATISTICS	198	59	40	297	153	871	1024	228	45	24	297	1094
TOTALS	386	112	82	580	706	1227	1933	451	85	44	580	1572
LOCK & DAM 2	***											
UPBOUND STATISTICS	184	59	36	279	553	348	901	211	43	23	277	487
DOWBOUND STATISTICS	195	63	34	292	154	862	1016	223	48	23	294	1089
TOTALS	379	122	70	571	707	1210	1917	434	91	46	571	1576
LOCK & DAM 3	***											
UPBOUND STATISTICS	156	140	6	302	542	352	894	162	117	41	320	487
DOWBOUND STATISTICS	163	144	6	313	142	848	990	168	115	42	325	1070
TOTALS	319	284	12	615	684	1200	1884	330	232	83	645	1557
LOCK & DAM 4	***											
UPBOUND STATISTICS	160	79	7	246	539	347	886	167	69	25	261	478
DOWBOUND STATISTICS	169	80	11	260	138	840	978	176	67	22	265	1059
TOTALS	329	159	18	506	677	1187	1864	343	136	47	526	1537
LOCK & DAM 5	***											
UPBOUND STATISTICS	140	497	7	644	441	318	759	143	374	17	534	421
DOWBOUND STATISTICS	142	497	14	653	118	686	804	152	386	19	557	936
TOTALS	282	994	21	1297	559	1004	1563	295	760	36	1091	1357
DAVID D TERRY LOCK & DAM	***											
UPBOUND STATISTICS	140	831	7	978	441	314	755	143	551	17	711	418
DOWBOUND STATISTICS	141	855	11	1007	125	674	799	149	567	20	736	915
TOTALS	281	1686	18	1985	566	988	1554	292	1118	37	1447	1333
MURRAY LOCK & DAM	***											
UPBOUND STATISTICS	119	669	20	808	397	273	670	138	445	13	596	373
DOWBOUND STATISTICS	124	662	20	806	100	613	713	137	450	19	606	853
TOTALS	243	1331	40	1614	497	886	1383	275	895	32	1202	1226

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC #4	DISTRICT NAME LITTLE ROCK	DIVISION NAME SOUTHWESTERN						MONTHS REPORTED				
								7/83	8/83		9/83	
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE (KTONS)
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL ee	COMMER	RECRTN	OTHER	TOTAL (NAV, OPN, ETC)	
-----												
ARKANSAS RIVER												
TOAD SUCK FERRY LOCK & DAM	***											
UPBOUND STATISTICS	123	106	0	229	405	292	697	124	79	16	219	399
DOWNBOUND STATISTICS	118	99	2	219	95	593	688	120	73	17	210	810
TOTALS	241	205	2	448	500	885	1385	244	152	33	429	1209
LOCK & DAM 9	***											
UPBOUND STATISTICS	113	81	2	196	395	264	659	114	67	12	193	364
DOWNBOUND STATISTICS	117	84	1	202	88	603	691	119	68	13	200	823
TOTALS	230	165	3	398	483	867	1350	233	135	25	393	1187
BOGANELLE LOCK & DAM	***											
UPBOUND STATISTICS	120	136	6	262	402	267	669	127	106	17	250	367
DOWNBOUND STATISTICS	123	133	6	262	90	615	705	132	103	18	253	845
TOTALS	243	269	12	524	492	882	1374	259	209	35	503	1212
OSARK LOCK & DAM	***											
UPBOUND STATISTICS	114	104	2	220	398	256	654	116	72	7	195	343
DOWNBOUND STATISTICS	118	98	0	216	82	605	687	120	65	7	192	846
TOTALS	232	202	2	436	480	861	1341	236	137	14	387	1189
LOCK & DAM 13	***											
UPBOUND STATISTICS	121	206	6	333	395	272	667	124	128	16	268	357
DOWNBOUND STATISTICS	125	212	6	343	96	606	702	129	136	17	282	920
TOTALS	246	418	12	676	491	878	1369	253	264	33	550	1277

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC M4	DISTRICT NAME LITTLE ROCK			DIVISION NAME SOUTHWESTERN								MONTHS REPORTED					
												7/83		8/83		9/83	
-----																	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

ERDC	DISTRICT NAME	DIVISION NAME	MONTHS REPORTED		
NS	TULSA	SOUTHWESTERN	7/83	8/83	9/83

RIVER	LCODE-LOCK NAME	LEN/WID/DRAFT (FT/FT/FT)
ARKANSAS RIVER	21-W D MAYO LOCK & DAM	0600/0110/14.0
	22-ROBERT S KERR LOCK & DAM & RES	0600/0110/14.0
	23-WEBBERS FALLS LOCK & DAM	0600/0110/14.0
	24-CHOUTEAU LOCK & DAM	0670/0110/14.0
	25-NEWT GRAHAM LOCK & DAM	0670/0110/14.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
FOR THE PERIOD 7/83 THROUGH 9/83  
INSTITUTE FOR WATER RESOURCES

EROC NS	DISTRICT NAME TULSA	DIVISION NAME SOUTHWESTERN	MONTHS REPORTED									
			7/83		8/83		9/83					
-----												
RIVER/LOCK NAME	TOWS	VESSL	VESSL	VESSL	BARGS	BARGS	BARGES	LOCKGS	LCKGES	LCKGES	LCKGES	TONNAGE
		RECRTN	OTHER	TOTAL	EMPTY	FULL	TOTAL	COMMER	RECRTN	OTHER	TOTAL	(KTONS)
-----												
ARKANSAS RIVER												
W D MAYO LOCK & DAM		***										
UPBOUND STATISTICS	116	384	10	510	396	222	618	122	149	9	280	304
DOWNBOUND STATISTICS	119	387	8	514	78	565	643	124	146	9	279	820
TOTALS	235	771	18	1024	474	787	1261	246	295	18	559	1124
ROBERT S KERR LOCK & DAM &RES		***										
UPBOUND STATISTICS	114	248	6	368	392	227	619	120	162	9	291	309
DOWNBOUND STATISTICS	120	265	3	388	78	566	644	122	152	8	282	809
TOTALS	234	513	9	756	470	793	1263	242	314	17	573	1118
WEBBERS FALLS LOCK & DAM		***										
UPBOUND STATISTICS	109	99	9	217	268	217	485	115	64	16	195	298
DOWNBOUND STATISTICS	112	112	5	229	93	391	484	116	68	17	201	575
TOTALS	221	211	14	446	361	608	969	231	132	33	396	873
CHUTEAU LOCK & DAM		***										
UPBOUND STATISTICS	97	36	12	145	201	167	368	108	29	6	143	216
DOWNBOUND STATISTICS	97	38	13	148	63	310	373	109	33	6	148	449
TOTALS	194	74	25	293	264	477	741	217	62	12	291	665
NEWT GRAHAM LOCK & DAM		***										
UPBOUND STATISTICS	94	35	10	139	196	167	363	104	32	5	141	215
DOWNBOUND STATISTICS	93	39	11	143	66	296	362	105	35	6	146	423
TOTALS	187	74	21	282	262	463	725	209	67	11	287	638



PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT  
 FOR THE PERIOD 7/83 THROUGH 9/83  
 INSTITUTE FOR WATER RESOURCES

EROC NS	DISTRICT NAME TULSA			DIVISION NAME SOUTHWESTERN									MONTHS REPORTED				
													7/83			8/83	

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